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AUTOMOTIVE MANUFACTURING ASSESSMENT SYSTEM
VOLUME II: PRODUCT SCHEDULES OF ENGINE/DRIVETRAIN
COMBINATIONS

Theodore Taylor, Jr. Alan R. Cunningham Dominic A. Iannelli

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PREFACE

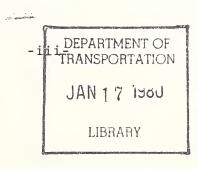
Volume II (Product Schedules of Engine/Driveline Combinations) was prepared for the Department of Transportation, Transportation Systems Center (TSC) and presents the results of research and analysis of the available engine, transmission, and rear axle combinations for all models of each domestic auto manufacturer for the model years 1975 through 1978. The work was directed by the Transportation Industry Analysis Branch under the sponsorship of the Energy Programs Division.

The motor vehicle manufacturers' ability to meet 1979-1985 fuel economy goals is heavily dependent upon the timeliness and degree by which they are able to reduce the size and weight of today's fleets, and incorporate more fuel efficient power plants, drivelines, safety, and emission control devices. By monitoring subtle changes in each domestic manufacturer's past and announced future engine/driveline combinations, a better understanding of the fuel economy and emission improvements is obtained. The results of this analysis are in the form of Engine/Driveline Product Schedules (Worksheets) and five different Summary Level charts which provide graphically, time phased relationships among combinations of engines, transmissions, models, and axle ratios for GM, Ford, Chrysler, and AMC.

This volume contains the results of one of four major areas investigated under the Automotive Manufacturing Assessment System (AMAS) which was designed to evaluate the capability of the automotive industry to produce fuel efficient cars and light trucks, and to assess the impact such conversions will have on producers and consumers. The other three areas are: Master Product Schedules (Volume I); Materials/Weight Analysis (Volume III); and Engine Manufacturing Analysis (Volume IV).

This volume is divided into five sections plus appendices. Section 1 describes the objectives of the analysis and presents the methodology used to develop the chronology of engine/driveline changes. Summary data and commentary for GM, Ford, Chrysler, and AMC are included in Sections 2, 3, 4 and 5 respectively. Supporting detailed information (Engine/Driveline Product Schedules) are located in the Appendices.

Corporate-Tech Planning wishes to acknowledge the guidance and assistance provided by Mr. George E. Byron, Transportation Industry Analysis Branch at TSC, who was the Technical Monitor for this program.



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LIST OF ABBREVIATIONS

A/C Air Conditioner(ing)
A.I. Automotive Industries

AMAS Automotive Manufacturing Assessment System

AMC American Motors Corporation

CAFE Corporate Average Fuel Economy

CID Cubic Inch Displacement

CTP Corporate-Tech Planning Inc.

DOT U. S. Department of Transportation

EFI Electronic Fuel Injection

FI Fuel Injection

FIOD Ford Integral Overdrive
GM General Motors Corporation

HO(H-O) High Output

 $L(\ell)$ Liter Modified

MPH(mph) Miles Per Hour

MVMA Motor Vehicle Manufacturers Association of the United

States, Inc.

OHC Overhead Camshaft
OHV Overhead Valve

PROCO Programmed Combustion

R Reverse

THM Turbo Hydramatic

TSC Transportation Systems Center V Venturi (Carburetor Barrel)

VV Variable Venturi

VW Volkswagen Windsor

W.A.R. Ward's Automotive Reports

W.E.U. Ward's Engine Update

1. INTRODUCTION AND SUMMARY

1.1 OBJECTIVES

It is widely recognized that total vehicle systems engineering optimizes the design of a new vehicle. It results in the combination of improved engines and drivetrains, suspensions, aerodynamic drag, tires, etc. and weight reduction (downsizing) while allocating a larger proportion of the available space to the passenger compartment.

This report addresses specific engine/driveline offerings of the four domestic manufacturers and provides a chronological perspective of the introduction of new engine and driveline combinations. The degree of engine changes and the extent to which they coincide with yearly model changes and downsizing plans (as shown in Volume I, Master Product Schedules) is essential to the understanding of each manufacturer's strategy to meet fuel economy and emission goals. To this end, a complete inventory of all engines and transmissions used from 1975 through 1978 by each manufacturer is detailed.

Engine/driveline changes are the second most important contribution to fuel economy (weight reduction being first) and are of major importance towards meeting emission standards. If all other factors are kept constant, lower axle ratios (or N/V) decrease fuel consumption until a minimum is reached (Figure 1-1) but at the expense of increased 0-60 mph acceleration time (decreased performance). When vehicle weight is reduced (and axle ratio is held constant), fuel consumption is also reduced and acceleration performance is improved. A lowering of axle ratio sufficient to maintain equivalent performance improves fuel economy further, above that gained by just the change in weight. A change in engine displacement (CID) results in almost the same change in fuel consumption as a change in axle ratio with the same effect on acceleration performance.

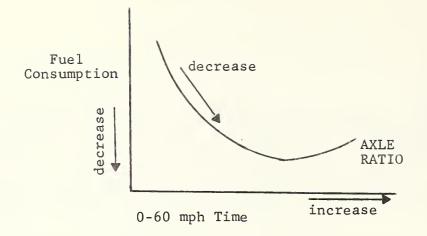


FIGURE 1-1. EFFECT ON FUEL CONSUMPTION AND PERFORMANCE OF DECREASED AXLE RATIO

As a result of the minimum fuel consumption reached with the decrease in axle ratio (Figure 1-1), it is engine size which basically determines acceleration performance for a given weight. "Axle ratio changes can be used to trade-off performance for fuel economy only over a very limited range."* Therefore, for any given performance level and vehicle weight, there is an optimum engine size to achieve minimum fuel consumption. Moreover, at the point of optimum size fuel consumption increases only slightly with small changes in engine size. For this reason, engine sizes usually vary by 30-50 CID with fine tuning for a specific performance level or fuel economy accomplished by minor changes in the axle ratio.

The data presented offers a method of observing the pattern of matching power team combinations to vehicle offerings on a year-to-year basis by each manufacturer. It becomes evident that the more combinations a manufacturer has at his disposal, the more efficient he can systems engineer vehicles to meet emissions and fuel economy standards at a minimum cost. General Motors has a wide assortment of engines and drivetrains to choose from whereas AMC is extremely limited and Chrysler and Ford are somewhere in between.

^{*}Marks, C., and Niepoth, G., <u>Car Design for Economy and Emissions</u>, SAE Paper 750954 presented at Automotive Engineering and Manufacturing Meeting, Detroit, October 1975.

Having laid out the engine/drivetrain usage by year, this data can then be correlated with plant and facilities to determine which plants will be affected by changes and to what extent. An attempt was made to identify sources of the components (especially the transmissions), whenever possible, to aid in this analysis.

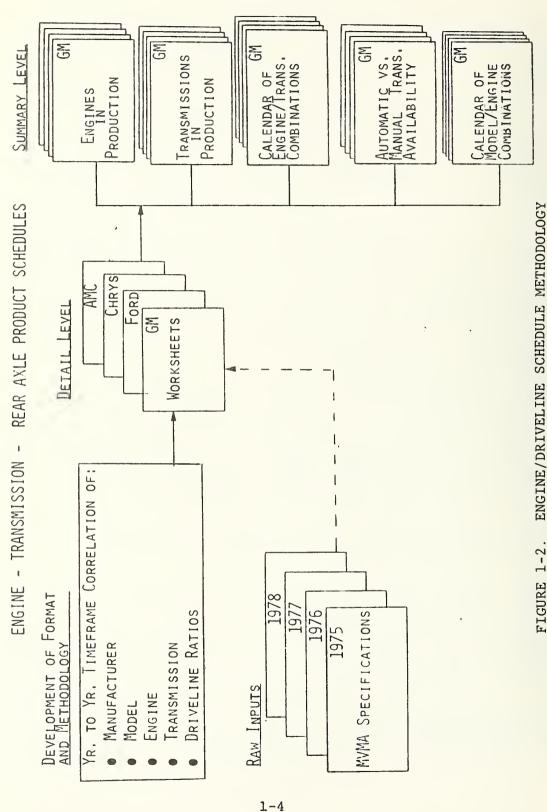
A complete inventory of all engine/drivetrain combinations for each domestic car produced by General Motors, Ford, Chrysler, AMC, and, where data was available, the captive imports of these manufacturers is provided for 1975 to 1978 model vehicles with some 1979 and 1980 information included as available.

This analysis also provides an overview of what technological advances each manufacturer employs in such areas as diesels, fuel metering, lock-up torque converters, and front-wheel-drive. An integrated compilation of information is provided as a research tool which assimilates the extensive data available on engines and drivetrains.

The methodology employed to compile the data is shown in Figure 1-2. A format was developed to organize that information or attributes which has the most affect on fuel economy from one model year to the next by: engine type, size and code; transmission type, forward speeds, and gear ratios; axle ratios; and models using these different combinations. Motor Vehicle Manufacturers

Association (MVMA) specifications for each model for the years 1975 through 1978 were the primary data source. In some cases, inconsistencies and errors in the specification data were clarified by direct contact with the manufacturer.

The extensive data was consolidated on detailed worksheets. Called Engine/Driveline Product Schedules, they were developed for General Motors, Ford, Chrysler, and AMC and are located in Appendices A through D respectively, along with more detailed discussion in Section 1.2. From these detail level worksheets, five different summary level charts for each manufacturer were developed to illustrate the interrelationship among model year, engine, transmission, and model. These charts are explained in Section 1.3 and are found in Sections 2 through 5 along with individual descriptive text.



1.2 DETAIL LEVEL WORKSHEETS

The engine-transmission-rear axle product schedule melds driveline information from many different MVMA Specification areas into one composite presentation. Defined as detail level worksheets, a set for GM, Ford, Chrysler, and AMC are found in Appendices A through D respectively. All of the summary level figures and tables were derived from data presented in these worksheets.

Because engine changes are much less frequent, than say the year-to-year model changes, engine manufacturer and type is used as the basic data identifier for worksheet entry. Once the engine is located, the different transmissions, axles, and models used with each engine can then be determined. One or more manual or automatic transmissions may be used by each engine. New or discontinued engines are given particular note. Special engine types and applications (transverse, diesel, etc.) are identified to assist in determining ranges of applications for a given engine size. The engines are listed in the order of increasing cubic inch displacement (liters for many). Other information included: engine type (IL-4, V-6, IL-6, V-8); fuel metering (1V, 2V, 4V, FI, VV); division (GM only); and engine manufacturing code (GM only when available).

The transmissions which are used by each engine are then shown for each year 1975 through 1978. Transmissions are first broken down by type (manual or automatic) with the make or code (i.e., Chevrolet, THM 300, etc.) for each transmission prominently listed. The forward speeds and gear ratios (for all forward speeds and reverse) are then listed for each year the transmission was used by each engine. The addition of a new transmission to the inventory is signified by a bold outlining of the forward speeds and gear ratios in the year offered. A "new" transmission is defined as one of all new design or a change in gear ratios from the previous year. All manufacturers have a wide variety of rear axle ratio combinations for matching engine/transmission combinations. Changes of these ratios are relatively easy to make and, in fact, are done frequently by each manufacturer to maximize performance, fuel economy, and emissions benefits. As a result, axle ratio changes are not considered new in this analysis even if an all new rear axle is offered.

All axle ratios used with each transmission are then shown. Notation is used to identify which ratios are available for each of the different emission requirements (Federal, California, high altitude). Ratios are also shown by vehicle model so that variances between different models using the same engine and transmission combinations can be easily identified. Vehicle models which are all now (as defined in Volume I, Master Product Schedules) are identified in bold outline for the appropriate year. With this system, new transmissions and engines which are introduced specifically for a new car can be determined. Specific and general explanatory notes are given in a table at the beginning of the worksheets.

The detail worksheets are best used to determine the gear ratios for different transmissions and the axle ratios used with different models or to determine more detailed information pertaining to availability based on the different emission requirements. The summary charts found in Sections 2 through 5 provide information on the production and matching of different engines and transmissions for 1975 through 1978 for each manufacturer and the usage of each engine and transmission type by model for each of those years. The summary charts are explained in Section 1.3.

1.3 SUMMARY CHARTS

Due to the complexity and quantity of information provided at the detailed worksheet level, a series of five additional charts were designed in order to summarize, by manufacturer, significant results and conclusions. The objective of these charts was to provide a guide to the engine/driveline trends of each manufacturer and to provide a base for projecting future trends.

Some of the trends deduced from the summary charts include:

- The use of more manual transmissions especially four and five speed manuals;
- 2) Reduction in the number of V-8 engines especially large block V-8's;

- 3) The increase in the number and use of L-4 and V-6 engines;
- 4) The addition of lock-up torque converters to automatic transmissions; and
- 5) The addition of transverse mounted engines and the conversion of current engines to transverse mounting to accommodate more front-wheel-drive vehicles.

These summary charts provide the following additional information:

- a) Engines in Production Indicates historical and projected use of engines by an auto manufacturer. The year new engines are introduced and the year in which engines were deleted is clearly shown;
- b) Transmissions in Production Displays historical and projected transmission usage including new and discontinued transmissions. Manual and automatic transmissions are segregated; the number of forward speeds and the first gear ratio are shown for each transmission as well as the manufacturer (division or independent supplier when known);
- c) <u>Calendar of Engine/Transmission Combinations</u> Depicts all engines and transmissions and how they were matched by model year;
- d) <u>Automatic vs. Manual Transmission Availability</u> Shows which vehicle models use each engine by transmission type (manual or automatic);
- e) <u>Calendar of Model/Engine Combinations</u> Displays the evolution of engine usage from 1975 to 1980. New vehicle model and engine introductions are highlighted.

The overall trend to smallness, as vehicles are downsized and front-wheel-drive is used more extensively, is readily apparent. In addition to this trend of smallness, there is also a large number of new engines scheduled for introduction which will improve tremendously the industry's flexibility for providing the optimum vehicle/power train combination to meet the more stringent fuel economy and emission standards. This trend is especially pronounced for GM, and for other manufacturers after 1980, as the Master Product Schedules (Volume I) illustrate.

Similarities and differences between manufacturers are easy to determine by taking each manufacturer's summary charts and making direct comparisons. For instance, American Motors is highly dependent on outside suppliers for their transmissions and, in some cases, engines while Chrysler, Ford, and GM are not; as GM was the first to actively pursue downsizing, they have been dropping large block V-8's where Chrysler and Ford have been slower to follow; Chrysler was the first to introduce lock-up torque converters for automatic transmissions; GM makes many minor carburetor and other engine modifications to existing power plants to tune them better to the requirements of the vehicles in which they are going to be installed; and GM was the first to offer a diesel engine or turbocharging in the quest for increased fuel economy.

AMC is more dependent upon technology improvements achieved by its suppliers (i.e., GM for emission control systems)--hence AMC advances in driveline and engine fuel economy and emission controls will reflect what these sources have to offer.

2. GENERAL MOTORS

2.1 SUMMARY

General Motors has a large number of engine/transmission combinations to support a line of thirty-one models. Over the period of 1975 to 1980, GM will have used more than fifty-four different engines or engine derivatives and twenty-six different transmissions (nineteen manual and seven automatic) for these models. In 1978 alone, a total of twenty-nine engines and eighteen transmissions (thirteen manual and five automatic) were offered. Over the next few years, General Motors has scheduled the introduction of a large number of new engines and derivatives to meet increased fuel economy and emission goals. These introductions include such features as smaller size displacement, light weight construction, higher power output, turbocharging, dieselization, transverse mounting, and new carburetion and fuel metering designs.

Most GM automatic transmissions are produced by Hydramatic Division for the various car divisions. A limited number of automatics such as the CBC 350, however, are produced jointly by the Chevrolet Division and the Canadian Division. In this analysis, all CBC 350 transmissions are identified as THM 350's for the sake of simplicity due to their essentially identical characteristics. In most cases, the choice between the Chevrolet and Hydramatic versions is a manufacturing option.

The detailed information worksheets (engine-transmission-rear axle product schedule) for General Motors are found in Appendix A. The summary charts are described in Sections 2.2 through 2.6 (Figures 2-1 through 2-8).

2.2 ENGINES IN PRODUCTION (Figure 2-1)

This figure displays the production availability of all General Motors engines from 1975 through 1978. Those new engines which have been scheduled for introduction in 1979 and 1980, as publicly reported, are also identified to show future trends. For this analysis, a "new" engine signifies any modification to the engine or fuel metering system which results in a new manufacturer engine code.

Engine description includes: type, size (in CID), fuel metering (number of carburetor barrels or fuel injection, EFI), engine code, and division. Important characteristics pertaining to specific engines are also shown (i.e., turbocharged, diesel, light weight, transverse, high performance).

Fifty-four engines are listed for use during the period 1975 through 1980. Of these, thirty-one were introduced during this period: eleven new four cylinder engines; seven new V-6 engines; six new small V-8's (305 CID or less); and seven new large block V-8's (350 CID to 425 CID). During this period nineteen engines were dropped: five four-cylinder engines (four of which were Chevrolet aluminum block engines: 122 CID-FI, LY3; 140 CID-1V, L13; 140 CID-2V, L11; and 140 CID-2V, high-output); one V-6 (the Buick odd firing 231 CID V-6 which was replaced by an even firing version); one small V-8 (the 262 CID Chevy V-8, a new small block Chevy V-8 is currently in development); and twelve large block V-8's (350 CID or larger, six of them 454 CID or larger). New engines of special note in 1978 were the Oldsmobile diesel 350 CID V-8 engine and two new 231 CID V-6 turbocharged engines (one 2-barrel and one 4-barrel carburetor). Refer to Figure 2-8 for a correlation of these engines against model changes (described in Section 2.6).

Items of particular note which require some additional comment are discussed below. Chevrolet introduced a new 97.6 CID engine in 1978 (the LW5) which uses a different carburetor than the LY5 97.6 CID and has a higher power output. Since the 85 CID engine was discontinued, the LW5 is used as an optional engine for the Chevette with the LY5 standard. In 1976 Chevy introduced the 122 CID LY3 4-cylinder aluminum block engine which was a destroked 140 CID aluminum block engine. The 122 CID engine was an overhead camshaft version with fuel-injection and a much higher power output specifically designed for the Cosworth Vega hatchback sport model which was discontinued in 1977. Pontiac introduced their new "Iron Duke" 151 CID LX6 engine for 1977 and the LS6 version specifically for the California emission standards in 1978. Chevrolet produces four different four-barrel carburetor 350 CID engines: the LM1 is the

standard engine; the LM1/Z28 is a high power sport version used only by the Z28 series Camaro; the L48 is the standard engine used by the Corvette; and the L82 is the higher power output version optional on the Corvette. The Pontiac W72 version of their L78 400 CID-4V engine is a high power engine used only on the Firebird Formula and Trans Am series sports cars.

2.3 TRANSMISSIONS IN PRODUCTION (Figure 2-2)

This chart depicts the transmission usage for General Motors from 1975 through 1978 with projections for 1979 and 1980. Information provided pertaining to each transmission includes: the number of forward speeds, first gear ratio, manufacturer (GM Division or independent supplier), and transmission code number for automatic transmissions. Bold outlining highlights the introduction year for new transmissions. Of the twenty-six transmissions listed, eighteen of them were used in 1978 (thirteen manual and five automatic). The automatic transmissions (which GM calls Turbo Hydramatic) are distinguished by code numbers. A code ending in 25 (i.e., THM 325) designates a front-wheel-drive configuration. The THM 125 transverse automatic is projected for introduction in 1980 for use on the new front-wheel-drive compact X-bodies.

All GM automatic transmissions are currently three-speed without lock-up torque converters, although four-speed and lock-up versions are projected in the future (see Volume I). New smaller and lighter transmissions (THM 180 and THM 200) have been added in recent years for use with the new generation of smaller lighter engines and vehicles.

Many new manual gear boxes have been added since 1976 which utilize new gear ratios; the addition of five-speed combinations are the most significant. It is observed that GM makes frequent changes in manual transmissions, while the automatics are more stable.

2.4 CALENDAR OF ENGINE/TRANSMISSION COMBINATIONS (Figure 2-3)

This chart matches the different engines and transmissions in use from 1975 through 1978. Laid out in matrix form, the year that

each engine was mated with a given transmission is shown by year slots in the matrix center; projected usage for 1979 and 1980 is also shown. Engine and transmission descriptions are consistent with those given in Figures 2-1 and 2-2 (Engines and Transmissions in Production).

By studying this chart, several trends in the use of engines and transmissions can be observed. An increased number of four and six cylinder engines are being offered with four and five speed manual transmissions as the public has become aware of the increased fuel economy potential of these combinations. Also apparent is the increased availability of more than one type of automatic transmission for each engine. This is especially evident with the THM 200 and THM 250 transmissions which are common with many engines, often as engineering options. This allows GM the alternative of using a lighter weight transmission for smaller load ranges such as in coupes, and a heavier one for those vehicles (such as wagons) requiring it.

2.5 AUTOMATIC VS MANUAL TRANSMISSION AVAILABILITY (Figures 2-4 through 2-7)

This is a convenient summary of the availability of manual and automatic transmissions for each model/engine combination recognizing that in many combinations only one transmission type is offered. In this presentation, all of the combinations by transmission type are given by model year (one figure for each year, 1975-1978). The models are categorized by market class as defined in Volume I, Master Product Schedules, to assist in making vehicle to vehicle comparisons. Engine descriptions are consistent with those given in Figure 2-1 (Engines in Production); bold outlining signifies new introductions in the applicable years.

Several observations can be made from this data. Manual transmissions are not usually used in large V-8 engines except in specialty sport models (i.e., Corvette, Firebird, Camaro); four and six cylinder engines are generally available with both automatic and manual transmissions.

2.6 CALENDAR OF MODEL/ENGINE COMBINATIONS (Figure 2-8)

Similar in format to "Automatic vs Manual Transmission Availability" (except that transmission type has been deleted and all information for years 1975 through 1980 has been consolidated), this chart illustrates that some engines were specifically introduced for use on particular new vehicles. Models are broken down by market class with the year each model was new (from 1975 through 1978) shown after the name. Engine information is similar to the other charts except that the introduction year (from 1975 through 1980) is also given. Time slots (similar to those used in Figure 2-3, Calendar of Engine/Transmission Combinations) depict available engine/vehicle combinations for each model year. Projected usage for 1979 and 1980 is shown by the use of parenthesis. Whenever a new model and engine are simultaneously introduced in a given year, bold outlining around the year highlights the event.

The trend towards models with smaller engines can be seen as the larger V-8 engines are dropped and new V-6 and 4-cylinder engines are added. Frequently, changes in engine sizes offered coincide with vehicle downsizing and weight reduction programs. Examples of new smaller engines accompanying new vehicle sizes include: the 1976 introduction of the Chevette and its accompanying two small 4-cylinder engines; the new 196 CID and 200 CID V-6 engines introduced in 1978 for the downsized intermediate models; the new 425 CID V-8 engine introduced in 1977 for the downsized Cadillacs; and the new 403 CID Oldsmobile V-8 engine introduced in 1977 for use on the downsized standard full-size vehicles.

On occasion, however, use of smaller engines (particularly as standard equipment) precedes vehicle downsizing; this also results in improved fuel economy but with some sacrifice in performance. Examples of engine size reduction without vehicle downsizing include: the 1977 addition of the 151 CID 4-cylinder engine to the Ventura/Phoenix and the 1976 addition of the 231 CID V-6 engine to the LeSabre.

			MODE	L YEAR	•		
ENGINE	1975	1976	1977	1978	1979	1980	1981
IL-4 85CID-1V LX3 (CHEVY)	NEW			DISCONTI	NUED		
IL-4 97.6CID-1V LY5 (CHEVY)	NEW				12223		
IL-4 97.6CID-1V LW5 (CHEVY)			NEW]		
IL-4 110.8CID-2V (ISUZU)	NEW				==3		
IL-4 122CID-FI LY3 (CHEVY)	new		DISCONTIN	IUED			
IL-4 140CID-1V L13 (CHEVY)			DISCONTIN	NUED			
IL-4 140CID-2V L11 (CHEVY)				DISCONT	INUED		
IL-4 140CID-2V HI-OUTPUT (CHEVY)			DISCONTI	NUED			
IL-4 151CID-2V LX6 (PONTIAC)		NEW]		
IL-4 151CID-2V LS6 (PONTIAC)			NEW]		

FIGURE 2-1. GM ENGINES IN PRODUCTION, 1975-81 2-6

			MODEL	YEAR			
ENGINE	1975	1976	1977	1978	1979	1980	1981
IL-4 151CID HI- PERFORMANCE (PONTIAC)	9			NEW	 	1	
IL-4 151CID TURBO (PONTIAC)				NEW	1		J
IL-4 151CID LT. WEIGHT (PONTIAC)				4	NEW		1
IL-4 151CID TRANSVERSE (PONTIAC)				6 CYLINDE	NEW		
V-6 (60°) 171CID TRANSVERSE (CHEVY)				O CILINDE	NEW		
V-6 196CID-2V LC9 (BUICK)			NEW)	I	
V-6 200CID-2V L26 (CHEVY).			NEV	7		† 1	
V-6 231CID-2V LD7 (BUICK)	NEW			DISCONTI	NUED		
V-6 (EVEN FIRING) 231CID-2V LD5 (BUICK)			NEV	N		t I	

FIGURE 2-1. GM ENGINES IN PRODUCTION, 1975-81 (CONTINUED) 2-7

			MODEL	YEAR			
GENERAL MOTORS ENGINE	1975	1976	1977	1978	1979	1980	1981
V-6 (TURBO) 231CID-2V LC5 (BU1CK)			NEW				
V-6 (TURBO) 231CID-4V 1.C8 (BU1CK)			NEW]		
L-6 250C1D-1V L22 (CHEVY)						0 1	
V-8 (DIESEL) 260CID (OLDS)				NEW			
V-8 260C1D-2V LV8 (OLDS)						٦ ن	
V-8 262CID-2V LV1 (CHEVY)	NEW		DISCONTING	JED			
V-8 301CID-2V L27 (PONTIAC)		NEW]	0	
V-8 301CID-4V L37 (PONTIAC)			NEW			1	
V-8 305CID-2V LG3 (CHEVY)	NEW]	1	
V-8 305CID-4V LG4 (CHEVY)			NEW]	!	

FIGURE 2-1. GM ENGINES IN PRODUCTION, 1975-81 (CONTINUED) 2-8

MODEL YEAR

ENGINE	1975	1976	1977	1978	1979	1980	1981
V-8 350CID-2V L32 (BUICK)			40000 days and a second	DISCON	TINUED		
V-8 350CID-4V L77 (BUICK)					I)	
V-8 350CID-2V L65 (CHEVY)			DISCONTI	NUED			
V-8 350CID-4V LM1 (CHEVY)]		
V-8 350CID-4V LM1/Z28 (CHEVY)		NEW]		
V-8 350CID-4V L48 (CHEVY)]		
V-8 350CID-4V L82 (CHEVY)							
V-8 350CID-2V (PONTIAC)			DISCONTIN	NUED			
V-8 350CID-4V L76 (PONTIAC)				DISCON	TINUED		
V-8 350CID-FI L49 (CADILLAC)	NEW						

FIGURE 2-1. GM ENGINES IN PRODUCTION, 1975-81 (CONTINUED)

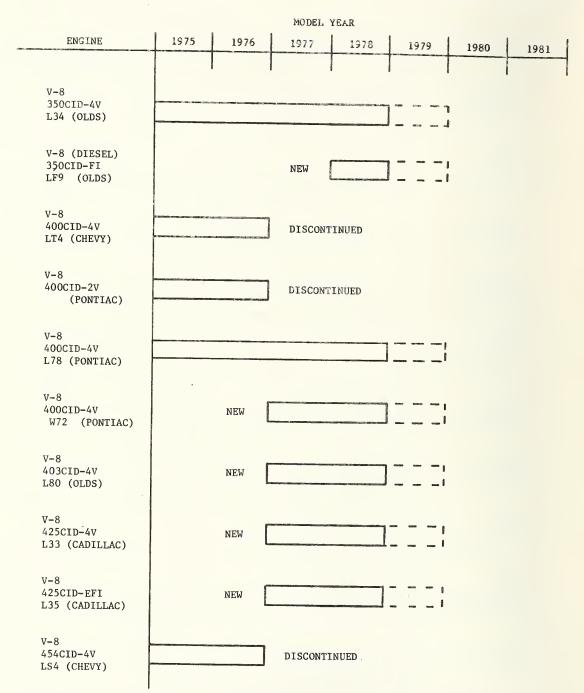


FIGURE 2-1. GM ENGINES IN PRODUCTION, 1975-81 (CONTINUED)
2-10

			M	ODEL YEAR			
ENGINE	1975	1976	1977	1978	1979	1980	1981
V-8 455CID-4V (BUICK)			DISCONTI	NUED			
V-8 455CID-4V (PONTIAC)			DISCONTI	NUED			
V-8 455CID-4V (OLDS)			DISCONTI	INUED			
V-8 500CID-4V (CADILLAC)			DISCONTI	NUED			
V-8 500CID-EFI (CADILLAC)			DISCONTI	INUED			

FIGURE 2-1. GM ENGINES IN PRODUCTION, 1975-81 (CONCLUDED)

GENERAL MOTORS							REVIS	ED: 8/1/78	AC-CTP	
12/2/										
Salar Rafille										
TACTURE IN	A. S.									
,c.4 /	183	TYPE	1975	1976	1977	1978	1979	1980	1981	1982
DAIKIN	3.51 5				-			-		
CHEVROLET	3.41 5							_		
CHEVROLET	3.40 5					-	-	-		ļ
CHEVROLET	3.10 5						ļ		ĺ	
BORG & BECK	3.75 4					 		-	1	l
CHEVROLET	3.75 4									
DAIKIN	3.51 4									
CHEVROLET	3.50 4									
CHEVROLET	3.11 4	NA	-					-		
BORG & BECK	2.85 4	MANUAL					İ			
CHEVROLET	2.85 4	Ì.					1			
CHEVROLET	2.64 4									
CHEVROLET	2.54 4				i					
BORG & BECK	2.43 4									
CHEVROLET	2.43 4									
BORG & BECK	3.50 3									
CHEVROLET	3,50 3									
CHEVROLET	3.11 3									
CHEVROLET	2.85 3									
TURBO HYDRAMATIC										
THM 125 TURBO HYDRAMATIC	3									
THM 180	2.40 3				Ţ					
TURBO HYDRAMATIC THM 200	2.74 3									
	2.74 3		ĥ							
TURBO HYDRAMATIC THM 325	3	AUTOMATIC								
TURBO HYDRAMATIC		ATIO								
THM 350	2.52 3	,								
TURBO HYDRAMATIC THM 400	2.48 3									
TURBO HYDRAMATIC	1 1									
THM 425	2.48 3	-								
	'———					!		I		

FIGURE 2-2. GM TRANSMISSIONS IN PRODUCTION, 1975-80

GM CALENDAR OF ENGINE/TRANSMISSION COMBINATIONS, 1975-80 FIGURE 2-3.

REVISED: 8/1/78 AC-CTP	AUTOMATIC	2.52/2.48/2.48	11 5 7 7 5 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	}	5 6 YEAR 5 10 S S 10 S S 10 S S S S S S S S S									
REVISED:	1 2 / 3 / 3 / 3 / 3 / 3 / 3	.11 /2.85 / 2.49/2	180, 25, 68, 68, 68, 68, 68, 68, 68, 68, 68, 68	(6)	(0) (6) (0) (6)		0 8	8 (6)	8 (6)		8 (0)		8 (3)	6 (9) 7 8 (9)
MANITYL TDANCMICCION	1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 3	.85/2.64/2.54/2.43/2.43/3.50/	17 109 1/10 1/10 1/10 1/10 1/10 1/10 1/10					8 (6)	8 (6)	5 7 6	8 (6) (6)			(9)
T TURE WANTER	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	3.75/3.75/3.51/3.50/3.11/	\$1500 \$1500	(0)	(0) (6)			8 6		2 6	8 8 8			
75–1980	2 2 2 2	3.49	15 10 10 10 10 10 10 10 10 10 10 10 10 10		0)(6)			8 (6)		7 7 6	8 (6)			
CPNFBAI MOTORS 1975-1980	A CHARLES TO THE CHAR	GEAR RATIO IN FIRST	WANUFACTURER DIVISION ENCINE	AC)	IL-4,151CID LT.WT. (PONTIAC)	TL-4,151CID TRANS. (PONTIAC)	V-6(60°),171CID TRANS. (CHEVY)	. V-6,196CID-2V LC9 (BUICK)	V-6,200CID-2V L26 (CHEVY)	V-6,231CID-2V ID7(BUICK)	V-6,231CID-2V LD5 (BUICK) EVEN	V-6,231CID-2V LC5 (BUICK) TURBO	V-6,231CID-4V LCB (BUICK) TURBO	L-6,250C1B-TV L-22 (CHEVY)

GM CALENDAR OF ENGINE/TRANSMISSION COMBINATIONS, 1975-80 (CONTINUED) FIGURE 2-3.

8/1/78 AC-CTP	AUTOMATIC	13/3/3/	52/2.48/2.48/	21.11.80.70G			5										
REVISED: 8/	AUTO	3/3/3/	2/2	11 13 13 13 13 13 13 13 13 13 13 13 13 1		6	7 8 7 8		7 8 7 8 7	00	8 7 8	8 8	5 6	7 8 8	5 6	7 8 7 8 (9) (9)	
		4/3/3/3/	3.50 5.50 3.11, 2.85,	\$350 E	1088 1110 1088 1110 11088 1110 1110 111		9				9				2	in .	
	STON	4 4 4	2.54 2.43 2.43	\$3.74 1.75.74	ONN, SHOW TOWN SHOW		5	5			7						
	MANUAL TRANSMISSION	4 4 4 4 4	3.11/2.852.85 /2.64	13	da ins						- ∞					28.0	
		4 4 4	3.75/3.75/3.51/3.50	10.	TONATHO AT		7	9 5	7		7					(9)	
		5/5/5/5	3.51 3.41 /3.40 3.10 /3	40114	04A3H3	!		9									
	RS 1975-1980	1			ASHO ALAINO ALAINO		8 (0)										
	GENERAL MOTORS 1975-1980		GEAR RATIO IN FIRST	MANUFACTURER DIVISION	ENGINE	V-8,260CID (OLDS) DIESEL	V-8,260CID-2V LV8 (OLDS)	V-8,262CID-2V LV1 (CHEVY)	V-8,301CID-2V L27 (PONTIAC)	V-8,301CID-4V L37 (PONTIAC)	V-8,305CID-2V LG3 (CHEVY)	V-8,305CID-4V LG4 (CHEVY)	V-8,350CID-2V L32 (BUICK)	V-8,350CIO-4V L77 (BUICK)	V-8,350CID-2V L65 (CHEVY)	V-8,350CID-4V LM1 (CHEVY)	

GM CALENDAR OF ENGINE/TRANSMISSION COMBINATIONS, 1975-80 (CONTINUED) FIGURE 2-3.

8/1/78 AC-CTP	0.	/3/3/3/	2.52 /2.48 /2.48				5 6 YEAR 7 8 SLOTS	. 9 0 0 175-180	1976 = 6, ETC. () = PROJECTED	10450					
: 8/1/	AUTOMATIC	3	2.74/2.	12 12 00 14 14 14 14 14 14 14 14 14 14 14 14 14			9	9	9						
REVISED:	A	3	2.40			8 8	8 7	9	6 7	7 8	6 5 6 8 7 8	8	9	5 6	6 5 6
	MANUAL TRANSMISSION	15 5 5 5 5 4 4 4 4 4 4 4 4 4 4 4 4 3 3 3 3	3.54 3.41 3.40 3.19 3.75 3.75 3.54 3.59 3.11 12.85 2.85 1.85 1.64 1.54 1.43 1.43 5.50 3.50 3.13 1.85	######################################	0 2 2	٥	5 6 5 7 8 6 7 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9	5	2		5 7 5		(9)		5 6 (9)
1975-1980	1975-1980			1370313760 1370313760											
GENETAL MOTORS 1975-1980		OTEAN NAME	SEAR KALLO IN FIRST	MANUFACTURER DIVISION ENGINE	V-8,350CID-4V LM1/228 (CHEVY)	V-8,350CID-4V L48 (CHEVY)	V-8,350CID-4V L82 (CHEVY)	V-8,350CID-2V (PONTIAC)	1 v-8,350cID-4v L76 (PONTIAC)	V-8,350CID-FI L49 (CADILLAC)	V-8,350CID-4V L34 (OLDS)	V-8,350CID-FI LF9 (OLDS) DIESEL	V-8,400CID-4V LT4 (CHEVY)	V-8,400CID-2V (PONTIAC)	V-8,400CID-4V L78 (PONTIAC)

GM CALENDAR OF ENGINE/TRANSMISSION COMBINATIONS, 1975-80 (CONTINUED) FIGURE 2-3.

AC-CTP	3 /3 /3 /	2/2.48/2.48/	27.1 150 17.2 (A) 27.1 150 (A) 27.1 15.				- 1	9 0 55-180	1976 = 6, ETC. () = PROJECTED	USAGE				
REVISED: 8/1/78 AC-CTP	3 / 3 / 3	100	J. 2434C	35. 12.		7 8 8 7 8.		7 8 7	5 6	5 6	5 6	5 5	5 6 5 6	9 9
	3 / 3 / 3 /	3.11/2.85/	ST. L. WAR											
	4/4/3/	2.43/3.50/3	4	ON THE										
SCTON	4 4 4	2.64/2.54/2.43	13	3 540g	- 80									
MANUTAL TRANSMENT	\	3.11/2.85/2.85/	4	Angho Townsho	-6									
	4/4/4	3.75/3.51/5.50/3	. 149	ONATHO SON TOWN THE ON A SHIP ON A S										
	15/5/4	3.40/3.10/3.75/3.	137	WISING CONSTRO										
	15/5/	3.573.41/3.4	14	ON TOWN										
0801-3201-39	KS 1913-1900	0		TONATHO ATAINO										
0801-3701 200mon violen	GENERAL MOTO	GEAR RATIO IN FIRST	MANUFACTURER DIVISION	ENGINE	V-8,400CID-4V W72 (PONTIAC)	V-8,403CID-4V L80 (OLDS)	V-8,425CID-4V L33 (CADILLAC)	V-8,425CID-EFI L35 (CADILLAC)	V-8,454CID-4V S4 (CHEVY)	V-8,455CID-4V 1 (BUICK)	V-8,455CID-4V (PONTIAC)	V-8,455CID-4V (OLDS)	V-8,500CID-4V (CADILLAC)	V-8,500CID-EFI (CADILLAC)

GM CALENDAR OF ENGINE/TRANSMISSION COMBINATIONS, 1975-80 (CONCLUDED) FIGURE 2-3.

GENERAL MOTORS 1975

					·
V-8 500 4V CAD					4 4
V-8 455 4V OLO			- V	Ą	
V-8 455 4V PO		-	4 4	, 4	4 4
V-8 455 4V BU				4	4 4
			4	A	
V-8 V-8 400 454 4V 4V PO CH L78 154	14 to 17 file areas-mannersharranses harrows film builded area	A/M	4 4	∀ ∢	∢ .
V-8 400 2V PO			۷	4	
V-8 400 4V CH LT4			۷ ۷	Ą	
V-8 350 4V 0L0 134			∢	۷.	
V-8 350 F1 CAD L49			. 4		
V-8 350 4V PO L76		A/M	A		
V-8 350 2V PO		Ą	4		
V-8 350 4V CH L82	A/M				
V-8 350 4V CH L48	A/M	4 4			
V-8 350 4V CH LM1		A/M A/M	A/M	V.	
V-8 350 2V CH L65		A/M A/M	A/M A/M	Ą	,
V-8 350 4V BU L77		4 4 4	∀	¥	
V-8 350 2V BU L32		4 4 4	A		
V-8 262 2V CH LV1	A/M	A/M			
V-8 260 2V OLO LV8		A/N A/M			
1L-6 250 1V CH 1.22		A/A A/A A/A A/A A/A	A/M A/M A/M		
V-6 231 2V BU LD7	A/M A/M	A/M	Α/Μ		
11.4 140 2v CH 111	A/M A/M A/M A/M A/M				
1L-4 1L-4 140 140 1V 2V CH CH L13 L11	A/M A/M A/M A/M A/M				
ENCINE C.I.D. CARB. BBL. DIVISION CODE		-COMPACT- CAMARO FIREBIRD NOVA NOWGA SKYLARK/APOLLO VENTURA	CENTURY CHEVELLE CUTLASS CRAND PRIX CRAND PRIX CE MANS MONTE CARLO	-FULL SIZE- CHEVROLET OELTA 88 LE SABRE PONTIAC	LUXURY STANOARD- ELECTRA NINETY EIGHT RIVIERA TORONADO ELDORADO CADILLAC

A = AUTOMATIC TRANSMISSION M - MANUAL TRANSMISSION

V-8 500 IFFI CAD						4 4
V-8 500 4V CAO						4 4
V-8 455 4V OLO				V	A	A A
V-8 455 4V PO			Σ	44	A	
V-8 455 4V BU						
V-8 454 47 CH					Α Α	A A
V-8 400 4V PO L78			A/M			
			A	A A	< 4	
8 V-8 00 400 1 2V 1 PO				4 4	A	
400 400 4V 4V CH				4 4	⋖	
0 L34				≪	⋖	
CAD CAD				A		
3 : V-8 3 : 350 4V PO L76			<	< <		
7-8 350 27 . P0			∢	< <		
V-8 350 4V CH 182		A/M				
V-8 350 4V CH L48		Α/Μ				
V-8 350 4V CH LM1			A/M A/M	< <	<	
V-8 350 2V CH L65		Marie de Mar		4 <	<	
V-8 350 4V BU L77			< < <	4	V .	
V-8 350 2V BU L32			444	V V		
V-8 305 2V CH 1C3			A/M	< <	-	:
V-8 262 2V CH LV1		A/M				
V-8 V 260 2 2V 2 010 C			A A M	A N		
IL-4 V 250 2 2 CH CH CH CH			A/M A/M A/M A/M			
V-6 III 231 2 2V IV BU CI LO7 L		A/W A/M A/M	V W V	M/W A A A		
			<	. <	<	
-4 11,-4 0 1140 2V CH 1 (HO)		M M M				
IL-4 IL-4 140 140 1V 2V CH CH L13 L11		A/M A/M A/M A/M A/M A/M				
-7		2 2	ř .			
IL-4 IL-4 110.8 122 2B F1 ISU CH LY3		2"				
		A/M				
4 11,-4 97.6 1V CH IVS	A/M A/M					
11-4 85 12-4	A/M					
ENGINE C.I.D. CARB. BBL. OIVISION CODE	MODEL -MINI- CHEVETTE	-SUBCONPACT- ASTRE CORVETTE MONZA OPEL BY ISUZU SKYNAUK STARFIRE STARFIRE STARFIRE	-COMPACT- CAMARO FIREBIRD NOVA OMEGA SKYLARK	-INTERMEDIATE- CENTURY CHEVELLE CUTLASS GRAND PRIX LE MANS MONTE CARLO SEVILLE	-FULL SIZE- CHEVROLET DELTA 88 LE SARRE PONTIAC	-LUXURY STANDARD- ELECTRA NINETY EIGHT RIVIERA TORONADO ELDORADO CADILLAC

2-19

A = AUTOMATIC TRANSMISSION M = MANUAL TRANSMISSION

V-8 425 EFI CAD L35						44
V-8 425 4V CAD L33						44
010 7,4 010 1,80			4	4 444	444	4444
V-8 400 4V PO W72			A/M			
V-8 400 4V PO L78			A	4 A	A	
V-8 350 4V OLO L34			4 444	4 444	444	444
V-8 350 FI CAD L49				V	,	
V-8 350 4V PO L76	-		4	44	. A	
V-8 350 4V CH L82		А/м				
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V-8 350 4V CH CH CH			A/M			
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V-8 350 4V BU L77				V V	4	« «
V-8 350 2V BU L32				A		
V-8 305 2V CH LG3		A/M	A/M A/M A/W	4 4	- A	
V-8 301 2V PO L27			A/M A/M	4 4	44	
V-8 260 2V OLO LV8		,	4	A/M	- V	
IL-6 250 1V CH L22			A/M A/M	A/M	V V	
V-6 231 2V BU LO7		A/M A/M	A/M A/M A/M	A/M A/M A/M	A A A	
11.4 151 2v PO LX6		A/M A/M	A/M			
11.1-4 140 2V CH L11		A/M A/M A/M				
10.8 20 20 ISU		M/A				
IL-4 IL-4 97.6 110.8 1V 2V CH ISU LY5	A/M					
1L-4 85 1V CH LX3	A/M					
ENGINE C.I.O. CARB. BBL. OIVISION CODE	MODEL -MINI- CHEVETTE	-SUBCOMPACT- ASTRE CONVETTE MONZA OPEL BY ISUZU SKYHANK STARFIRE SUNBIRO VEGA	-COMPACT- CAMARO FIREBIRD NOVA OMEGA SKYLARK VENTURA	-INTERMEDIATE- CENTURY CHUPLELE CUTLASS CRAND PRIX LE MANS MONTE CARLO SEVILLE	-FULL SIZE- CHEVROLET DELTA 88 LE SABRE FONTIAC	-LUXURY STANOARD- ELECTRA ININETY FIGHT RIVIERA TORONADO ELOORADO CAOILLAC

A = AUTOMATIC TRANSMISSION M = MANUAL TRANSMISSION

GI AUTOLATIC VS MANUAL TRANSMISSION AVAILABILITY, 1977

FIGURE 2-6.

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V-8 425 4V CAD L33					_	4 4
V-8 403 4V 0LD L80			4		AAA	4444
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V-8 400 4V PO L78			A		4	
01ESE 350 FI 0LD LF9					4	∢
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V-8 350 FI CAD L49				4		
V-8 350 4V CH L82		A/M				
V-8 350 4V CH L48		А/м				
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V-8 350 4V BU L77			-		<	A A
V-8 305 4V CH LC4				44 4		
V-8 305 2V CH LC3		A/M A/M	A/W A/W A/W A/W	A A A A A A A A A A A A A A A A A A A	4 4	
V-8 301 4V P0 L37				4 4		
V-8 301 2V PO L27				V V	A A	
V-8 260 2V OLD LV8				A/M	- V	
V-6 250 1V CH L22			A/M A/M		∢	
TURBO V-6 231 4V BU LC8				A	A	
TURBG V-6 231 2V BU BU LC5				A	A	
V-6 231 2V BU LDS		A/A A/A A/A A/A	A/M A/M A/M	A/W A/W A/W A/W A/W	4 4 4	
V-6 200 2V CH L26				A/M		
V-6 196 2V B U LC9		A/M		A/M A/M		
IL-4 151 2V PO LS6		A/M A/M				
L-4 51 51 V 00 X6		A/M A/M A/M	A/M			
110.8 2V ISU		Α/Μ				
IL-4 IL-4 IL-4 I 97.6 97.6 110.8 I 1V 2V 2V CH CH ISU E LV5 LW5 I	A/M					
1L-4 97.6 1V CH LY5	A/M					
ENGINE C.I.D. CARB. BBL. DIVISION CODE	MINI- CHEVETTE	SUBCOMPACT— CORVETTE MONZA OPEL SKYHAMK STARFIRE SUNBIRD	-COMPACT- CAMARO FIREBIRD NOVA OMEGA SK'LARK PHOENIX	INTERREDIATE- REGAL CENTURY NALEBU COUTLASS GRAND PRIX LE NANS MONTE CARLO SEVILLE	FULL SIZE- CHEVROLET DELTA 88 LE SABRE PONTIAC	LUXURY STANDARD— ELECTRA NINETY EIGHT RIVIERA TORONADO ELDORADO CADILLAC

A = AUTOMATIC TRANSMISSION
M = MANUAL TRANSMISSION

FIGURE 2-7. GH AUTOHATIC VS MANUAL TRANSMISSION AVAILABILITY, 1978

REVISED: 8/1/78 AC-CTP

GM CALENDAR OF MODEL/ENGINE COMBINATIONS, 1975-79 FIGUPE 2-3.

REVISED: 8/1/78 AC-CTP		Cariala Civilato	NOTE: 5 = 1975 6 = 1976 PTC	() PROJECTED USAGE	5 6 YEAR 7 8 SLOTS 9 0 0 75-180								
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GM CALENDAR OF MODEL/ENGINE COMBINATIONS, 1975-79 (CONTINUED) FIGURE 2-8.

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V-8 (DIESEL) 260CID (OLDS)	(NEW FOR 1979)																NOTE: 5 = 1975 6 = 1976, ETC.
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LVI (CHEVY) V-8 '77 301CID-2V L27 (PONTIAC)					7 7	+		7 8 (9)	7 8 (9)		-	(9) (9)	66)		ļ		
V-8 '78 30ICID-4V L37 (PONTIAC)								⊠ 6)	© 6								
V-8 '76 305CID-2V LG3 (CHEVY)	7 8 (9)	8 8 8	7 8 8 (9) (9)	7 8 7 8	5 2	8 (6)	8 7 8 (9) (9)	8 8 (6) (6)	8 7 8 (9) (9)	980	7 8 (9)	8 (6)					
V-8 '78 305CID-4V LG4 (CHEVY)						— © ™ 6	⊠ €	© (6)									
V-8 350CID-2V L32 (BUICK)				2 6	5 6 5	6 5	9										

GM CALENDAR OF MODEL/ENGINE COMBINATIONS, 1975-79 (CONTINUED) FIGURE 2-8.

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GENERAL MOTORS 1975 -1980	ENG INE	V-8 '75 350CID-FI	L49 (CADILLAC)	V-8 DIESEL '78 350CID-FI	LF9 (OLDS)	V-8 400CID-4V LI4 (CHEVY)	V-8 400CID-2V (PONTIAC)	V-8 400C10-4V	V-8 '77 400CID-4V W72 (PONTIAC)	V-8 '77 403CID-4V 180 (GIDS)

GM CALENDAR OF MODEL/ENGINE COMBINATIONS, 1975-79 (CONCLUDED)

FIGURE 2-8.

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GENERAL MOTORS 1975 -1980	AC)	AC)			6		AC)	AC)
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ŒRAI	ENGINE V-8 '77 425CID-4V I.33 (CADILLAC)	V-8 '77 425CID-EFI L35 (CADILLAC)	V-8 454CID-4V LS4 (CHEVY)	V-8 455CID-4V (BUICK)	V-8 455CID-4V (PONTIAC)	V-8 455CID-4V (OLDS)	V-8 500CID-4V (CADILI	V-8 500CID-EFI (CADILLAC)
เลอ	U-1	V-8 425 L35	V-8 454 154	455	V - 8	V-8 455C	V - V	V-8 500C



FORD MOTOR COMPANY

3.1 SUMMARY

Ford has a relatively small number of engines and transmissions for the number of vehicle models produced when compared with General Motors. Over the period of 1975 to 1978, Ford will have used only eleven different engines or engine derivatives and thirteen transmissions (nine manual and four automatic) for eighteen models. In 1978, a total of eleven engines and nine transmissions (five manual and four automatic) were offered.

A relatively small number of new engines and derivatives are scheduled for future introduction. In 1980, a new 255 CID small bore V-8 engine is scheduled for introduction along with a dual displacement version of the 302 CID V-8 engine. Ford is currently developing the PROCO (programmed combustion) engine which should provide a fuel economy improvement of 20% at low emissions for use in the 1980's. In addition to these engines, new carburetors, fuel metering, and turbochargers are expected. Large engines to be dropped include the 460 CID in 1979 with the introduction of the new Ford downsized standard autos and the 400 CID V-8 in 1980 with the introduction of the new downsized luxury standard Lincoln and Mark V models. Refer to Master Production Schedules (Volume I) for qualitative projections of other new engines and technological advances.

Ford's 351 CID V-8 provides an interesting example of engine development in which a specific displacement is achieved via alternative approaches. There are actually two different engines displacing 351 cubic inches, the modified (M) version and the Windsor (W) version. The 351 M engine was derived from the 400 CID V-8 which had the stroke reduced from 4 inches to 3.5 inches while maintaining the same four-inch bore. The 351 W engine was derived from the 302 CID V-8 which had the stroke increased from 3 inches to 3.5 inches while maintaining the same four-inch bore. The 351M and 351W, therefore, have identical bores and strokes but actually use entirely different blocks. This results in a ninety pound weight

difference between the heavier 351M and the lighter 351W. As vehicles become smaller and lighter, the M version will be phased out in favor of the lighter W version. Although both engines are currently used interchangeably in many models, specific applications dictate a preference (i.e., the 351M is used primarily in heavy duty applications such as station wagons). The Product Schedule in Appendix B makes the distinction in specific applications but, for simplicity, both engines are consolidated as one on the summary charts.

While GM and Chrysler are working with lock-up torque converters on three-speed automatic transmissions, Ford has been developing a four-speed automatic with overdrive called the FIOD (Ford Intergal Overdrive). This transmission allows better matching of engine speed to load especially in city driving but also provides improved economy on the highway. Ford considers this an improvement over the lock-up torque converter as an addition to existing transmissions and expects to have FIOD installed on all standard size cars and some light trucks in 1980.

The detailed information worksheets (Engine-Transmission-Rear Axle Product Schedules) for Ford Motor Company are found in Appendix B. The summary charts are described in Sections 3.2 through 3.6 (Figures 3-1 through 3-5).

3.2 ENGINES IN PRODUCTION (Figure 3-1)

This figure displays the production availability of all Ford engines from 1975 through 1979. Engine description includes: type, size (in CID), fuel metering (number of carburetor barrels or variable venturi), and the angle for V-type engines when different from 90°. The page numbers refer to the detailed tabulations in Appendix B (Figure B-1). Eleven engines are listed for use from 1975 through 1979. Of these only three were new during this period, one each of four, six, and eight cylinders. In 1977, variable venturi carburetor (VV) versions of the 170.8 CID V-6 and 302 CID V-8 engines were introduced in some California vehicles as an emission control test. The 98 CID four cylinder engine was new in 1978 and

is made specifically for the Fiesta in a transverse mounted configuration. These engines are shown in bold outline to highlight the year of their introduction.

Large engines were maintained through 1978 but will be phased out over the next two years. The 460 CID V-8 will be dropped in 1975 with the 400 CID V-8 engine only available on the Lincoln and Mark V models. In 1980, when the Lincoln and Mark V are downsized, the 400 CID engine will also be dropped. Ford's somewhat slower trend towards smaller engines is due to a large car downsizing schedule that is two years behind GM.

3.3 TRANSMISSIONS IN PRODUCTION (Figure 3-2)

Transmission usage for Ford from 1975 through 1978 is depicted in Figure 3-2 with the year of introduction indicated by bold outlines. Of the thirteen transmissions listed, ten of them were used in 1978 (six manual and four automatic). The automatic transmissions (which Ford calls Select Shift) are distinguished by code: C3, C-4, C-6, and FMX. All Ford automatic transmissions are currently three speed and have remained the same since 1975. No lock-up torque converters are available, although a more efficient low slip torque converter was added in 1978. The four speed FIOD automatic transmission is scheduled for introduction in 1980 as a replacement for the C-6 and FMX automatics on the large cars and engines.

Five new manual transmissions have been introduced since 1976 which utilize new gear ratios. These have generally replaced other discontinued transmissions. Four of these new transmissions were four speed models and one was a three speed; no five speed manual transmissions are projected for Ford. Ford buys all of its manual transmissions from outside suppliers and most of them are outside the U.S. The automatics, on the other hand, are all produced by Ford with only the C-3 produced outside the U.S. This transmission is used primarily on the European 170.8 CID V-6 engine and the 140 CID engine (see Figure 3-3).

3.4 CALENDAR OF ENGINE/TRANSMISSION COMBINATIONS (Figure 3-3)

This figure matches the different engines and transmissions in

use from 1975 through 1978. Using the same format as GM (see Section 2-4), engine and transmission descriptions are consistent with those given in Figures 3-1 and 3-2 (Engines and Transmissions in Production). There are actually two different 351 CID V-8 engines, the modified (M) version and the Windsor (W) version, but for simplicity, they are shown as only one engine. See Section 3.1 for a more complete discussion of the differences between these engines.

The main point generated from this chart is that Ford makes very few engine/transmission changes. Some minor switching of gear ratios has been done in the three and four speed manual transmissions but no major changes have occurred. Ford still has no five speed manual transmissions and has only one three speed which is used with the 200 CID L-6 engine on the Fairmont and Zephyr. All other engines from the 302 CID V-8 and smaller use a four speed manual transmission; engines larger than the 302 CID V-8 use only automatics. The C-4 automatic is the most widely used transmission.

3.5 AUTOMATIC VS. MANUAL TRANSMISSION AVAILABILITY (Figure 3-4)

This is a convenient summary of the availability of manual and automatic transmissions for each model/engine combination recognizing that in many cases only one transmission type is offered. One chart presents all of the combinations by transmission type for model years 1975-1978. The models are categorized by market class as defined in Volume I, Master Product Schedules, to assist in making vehicle to vehicle comparisons. The engine descriptions are consistent with those given in Figures 3-1 and 3-3. Bold outlining signifies new introductions in the applicable years.

Several observations can be drawn from this data. Manual transmissions are not used with large V-8 engines (351 CID and greater) while four and six cylinder engines are generally available with both automatic and manual transmissions. The 302 CID V-8 with a two-barrel carburetor and a manual transmission was offered only in the Mustang II, Granada, and Monarch. Models with variable venturi carburetors were only available with automatic transmissions and only

in California in 1978 (except the Versailles). This carburetor is being used in conjunction with feedback controls to help meet the stringent California emission requirements and is being considered for use nationwide in 1980, when a further increase of federal emission standards goes into effect.

The availability of many transmissions (especially manuals) on various model/engine combinations is restricted due to emission standards and testing requirements. This is common with all manufacturers as they must test each combination for three separate standards (Federal, California, and High Altitude). Even though manual transmissions can provide higher fuel economy, they also produce higher emissions due to the gear shift schedules and variability of individual drivers in shifting. Consequently, the availability of some engine-transmission-model combinations will be restricted, especially in California and high altitude areas.

3.6 CALENDAR OF MODEL/ENGINE COMBINATIONS (Figure 3-5)

Using the same format as GM (see Section 2.6), this chart projects a definite trend to the use of smaller engines and highlights some new engines which were, in some cases, specifically introduced for use on particular new vehicles. An example of a new engine accompanying a new vehicle is the 98 CID four cylinder engine which was introduced in 1978 specifically for the Fiesta.

Examples of the use of smaller engines include two types: the dropping of large engines from the options list and the substitution of smaller engines as standard equipment. The Thunderbird and LTD II dropped the 460 CID V-8 in 1977; while the Granada and Monarch dropped the 351 V-8 engine in 1978. Smaller engines were added as standard equipment on several models including the 302 CID V-8 to the Thunderbird, LTD II, and Ford in 1977; the 351 CID V-8 on the Mercury in 1978; and the 140 CID four cylinder to the Fairmont and Zephyr in 1978 (the Maverick and Comet did not use this engine).

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FIGURE 3-1. FORD ENGINES IN PRODUCTION, 1975-79

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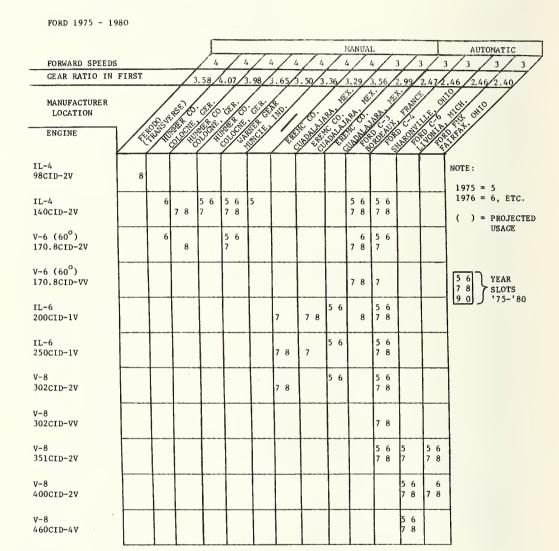


FIGURE 3-3. FORD CALENDAR OF ENGINE/TRANSMISSION COMBINATIONS, 1975-78

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1973 1977 1984. 11-4 V-6 11-6 11-6 V-8 V-8 V-8 V-8 V-8 V-8 V-8 11-4 V-6 V-6 11-4 V-6 V-6 11-6 V-8	4
1977 1977	٠.
1977 1977 1977 1977 1976 1976 1976 1976 1976 1976 1976 1976 1976 1976 1976 1976 1977 1976 1976 1977 1976 1977 1976 1976 1977 1976 1977	
1975 111-4 Ve 110-6 110-6 Ve 10-9 110-6 1	
1975 11-4 Ve	
1975 11.1-4 V-6 11.1-6 11.1-	
1975 11.1-4 V-6 11.0-6	
1975 1975 10.4	
1975 1976 10.0 200 250 350 351 400 460 11-6 11-6 11-6 11-6 11-6 11-6 11-6 11	
1975 10.4 V-6 (11-6 12-6 V-8 V-8 V-8 V-8 (11-4 V-6 11-6 11-6 V-8	
1975 111-4 V-6 (11-6 11-6 V-8 V-8 V-8 V-9	4
1975 10.0	<
1975 1977 1978 10.4 V-6 11.6	
1975 10.1 11.4 V-6 11.6	
1975 10.1 10.4 10.5 10.4 10.6	
1975 111-4 V-6 11-6 11-6 V-8 V-8 V-9 V-9 11-4 V-6 11-6 V-9	
1975 10.4 V-6 III-4 V-6 III-6 V-8	
1975 10.1 10.4 10.4 10.4 10.4 10.4 10.6	
19.75 114 V-6 116 116 126 1	<
1975 114 V-6 116 116 V-8 126 116 16 16 16 16 16 16	<
10. E	NOIS
114 V-6 116 12	SMIS
N. B. B. B. A. REPONT '73	A = AUTOMATIC TRANSMISSION
N. B. B. B. A. REPORT '78	MATIC
N. B. B. B. A. REPORT '78	AUTO
1976 C. I. D. GARB. B8B. C. I. D. GARB. B8B. A 175 DIATE 177 177 177 187 177 187 177 187 177 187 177 187 177 187 187 177 187 177 187	A A
FORD 1975-1978 FORD 1975-1978 WODEL CARB. WODEL CARB. WODEL TEPW COMENT TS WOTERO TT FILTE TS WONTEO TORING/IND IT FULL SIZE— FULL SI	MERCIRY 175

FORD AUTOMATIC VS MANUAL TEANSMISSION AVAILABILITY, 1975-78 FIGURE 3-4.

M = MANUAL TRANSMISSION

F19.1.

FORD CALENDAR OF MODEL/ENGINE COMBINATIONS, 1975-78 FIGURE 3-5.

4. CHRYSLER CORPORATION

4.1 SUMMARY

Chrysler Corporation, the smallest of the domestic big three auto manufacturers, offers more engines, transmissions, and models than Ford Motor Company. This is primarily due to its affiliation with Mitsubishi of Japan; Chrysler sells Mitsubishi's Arrow, Colt, Sapporo, and Challenger models as captive imports. These models, along with their engines and transmissions, provide Chrysler with needed penetration in the small and sports car markets. Over the period 1975 through 1978 Chrysler used sixteen different engines or engine derivatives and eighteen transmissions (nine manual and nine automatic) on twenty-two different models. In 1978 alone, a total of fifteen engines and eleven transmissions (six manual and five automatic) were offered on sixteen models.

Only a small number of engine and transmission modifications are projected for future introduction by Chrysler. In 1979 the 360 CID V-8 will be the largest engine as the 400 and 440 CID V-8's are discontinued in conjunction with the introduction of new smaller full size vehicles. At this time Chrysler's lean burn system will be dropped in favor of a new electronic spark control system. A new induction manifold injection system and turbocharger are expected for 1979 and 1980, respectively. Chrysler is developing a 225 CID prechamber diesel engine, derived from the well known slant six engine, which should be introduced in 1980. New domestic four-cylinder engines are due for introduction in the 1980's (to replace the current modified VW four) along with new fuel metering and injection systems. Also under development is a 225 CID six cylinder single chamber advanced technology diesel for possible introduction in the mid-1980's.

Chrysler was the first domestic auto manufacturer to introduce a new lock-up torque converter on many of their automatic transmissions for 1978, allowing an approximate 5% fuel economy improvement; the availability of this torque converter will be expanded to more model and engine combinations in 1979 and later years. No four-speed automatic transmissions (or overdrive versions) are forecasted for use by Chrysler. See Volume I, Master Product Schedules, for a more detailed discussion of the product plans for Chrysler and the other auto manufacturers.

The detailed information worksheets (Engine-Transmission-Rear Axle Product Schedule) for Chrysler Corporation are found in Appendix C. The summary charts are described in Section 4.2 through 4.6 (Figures 4-1 through 4-5).

4.2 ENGINES IN PRODUCTION (Figure 4-1)

This figure displays the production availability of all Chrysler engines from 1975 through 1979. Engine description includes: type, size (in CID), and fuel metering (number of carburetor barrels). Sixteen engines are listed for use during the period 1975 through 1979. Of these engines only five were new during this period: three 4-cylinder, one 6-cylinder, and one 8-cylinder engine. Two of the three new 4-cylinder engines were from Mitsubishi and the other was from VW for use in the Omni/Horizon. A 2-barrel version of the 225 CID slant 6 engine and a 4-barrel version of the 318 CID V-8 engine were also added. The 400 CID 2-barrel engine was discontinued in 1978 and the 400 and 440 CID 4-barrel engines were discontinued for 1979. Projected engine usage for 1979 is shown by dash lines; new engine introductions are marked by a bold outline in the appropriate year.

4.3 TRANSMISSIONS IN PRODUCTION (Figure 4-2)

This chart depicts the transmission usage for Chrysler from 1975 through 1978. Bold outlining highlights the introduction year for new transmissions. The total number of transmissions listed is eighteen, with eleven of them in use in 1978 (six manual and five automatic). Codes are used on most of the automatic transmissions (named Torqueflite) to disinguish differences. All Chrysler automatic transmissions are currently three-speed; lock-up torque converters were available in 1978 on the A-904-LA, A-727 and A-999

models. Most automatic transmissions are new since 1976 (three in 1976, two in 1977, and one in 1978) but several were dropped in 1978.

Chrysler offers only a small number of manual transmissions. For domestic rear-drive vehicles only one three-speed and one four-speed (overdrive) manual are offered. The only five-speed manuals are from Mitsubishi; the Omni/Horizon used a VW four-speed manual transaxle. There is very little transmission switching by models from year to year by Chrysler due to the small number available. All Chrysler automatics are domestically produced with the exception of the Mitsubishi model produced in Japan.

4.4 CALENDAR OF ENGINE/TRANSMISSION COMBINATIONS (Figure 4-3)

This chart matches the different engines and transmissions in use from 1975 through 1978. Using the same format as GM (see Section 2.4), engine and transmission descriptions are consistent with those given in Figures 4-1 and 4-2 (Engines and Transmissions in Production).

As with Ford, Chrysler makes very few engine/transmission changes. Some minor changes of gear ratios has occurred with four-speed manual transmissions and some transmissions have been dropped, but no major changes have transpired. Chrysler does not have a domestic five-speed manual transmission and only offers a five-speed manual on captive imports produced by Mitsubishi. The 225 CID L-6 engine is the only engine using a three-speed manual transmission. The only manual transmissions offered with the 121.7 and 155.9 CID Mitsubishi engines have five-speeds. All other engines use a four-speed manual as standard equipment; it is optional with the 225 CID L-6. All engines have at least one automatic transmission available and some V-8's have two or more.

4.5 AUTOMATIC VS. MANUAL TRANSMISSION AVAILABILITY (Figure 4-4)

This is a convenient summary of the availability of manual and automatic transmissions for each model/engine combination recognizing that in many combinations only one transmission type is offered. Using the same format as Ford (see Section 3.5), engine descriptions are consistent with those given in Figures 4-1 and 4-3.

From this data, several observations can be drawn. Manual transmissions are not used in any engine larger than the 318 CID 2-barrel. Manual transmissions are also not available with some smaller engine sizes on some models (Charger, Magnum, Cordoba, and all full size cars). Manual transmissions are generally available on the 318 CID 2-barrel V-8 engine and all four and six cylinder engines. Year to year changes in engine or transmission type for Chrysler models are not very common. Changes made in 1978 include the addition of the 360 CID engine to the full size Chrysler model and the addition of the 225, 360, and 400 CID engines to the Diplomat/LeBaron.

4.6 CALENDAR OF MODEL/ENGINE COMBINATIONS (Figure 4-5)

Using the same format as GM (see Section 2.6), this chart demonstrates that the trend at Chrysler (like Ford) is toward smaller engines and the introduction of new engines for specific new vehicles. From this chart it can be seen that the 318 CID V-8 4-barrel was introduced for the Magnum XE in 1978 and the 104.7 CID 4-cylinder engine was introduced for the Omni/Horizon also in 1978. The Mitsubishi models introduced in 1978 also came with their own 155.9 CID 4-cylinder engine. The trend towards smaller engines by Chrysler manifested itself recently with the addition of the 225 CID engine in the Diplomat/LeBaron and the dropping of the 400 CID 2-barrel engine in 1978. More changes will occur in 1979 when the remaining 400 CID and 440 CID engines are dropped and the new lighter full-sized R-body is introduced using smaller engines.

REVISED: 8/1/78 AC-CTP

CHRYSLER ENGINE	1975	1976	1977	1978	1979	1980	1981
IL-4							
97.5CID-1V						-	
IL-4 97.5CID-2V							
IL-4 104.7CID-2V							
IL-4 121.7CID-1V							
IL-4 121.7CID-2V							
IL-4 155.9CID-1V							
IL-4 155.9CID-2V							
IL-6 225CID-1V							•
IL-6 225CID-2V				1			
V-8 318CID-2V							
V-8 318CID-4V							
V-8 360CID-2V							
V-8 360CID-4V						-	
V-8 400CID-2V							
V-8 400CID-4V							
V-8 440CID-4V					I		
					ŕ		

FIGURE 4-1. CHRYSLER ENGINES IN PRODUCTION, 1975-79

CHRYSLER REVISED: 8/1/78 AC-CTP

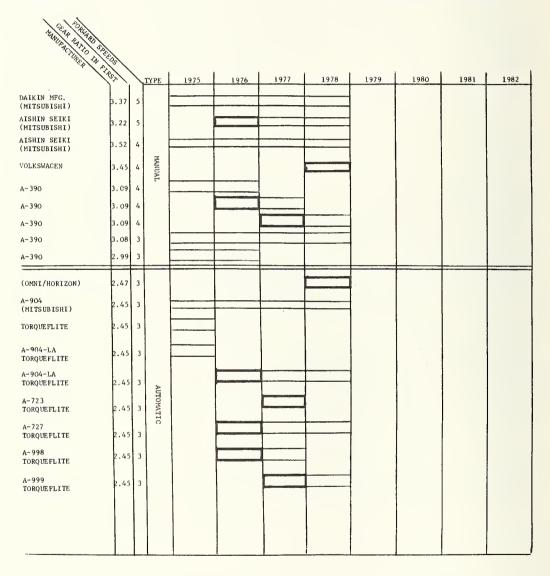


FIGURE 4-2. CHRYSLER TRANSMISSIONS IN PRODUCTION, 1975-78

	2.45 2.45		5 6) YEAR		1976 = 6, EIC. () = PROJECTED USAGE		NDTE: In 1978 Models new lock-up auto trans- mission is used in:	-All Federal models except 44DCID V-8.	-All California models except 44DCID V-8 & 22SCID IL-6.	-No high altitude models.	11/11/77, p. 4.			7 8	7 8		
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		13 18 18 18 18 18 18 18 18 18 18 18 18 18	7 8	7 8													
		120				7 8	7 8	80	α0								
CHRYSLER 1975-198D	PORWARD SPEEDS GEAR RATIO IN FIRST	MANUFACTURER	1L-4 97 scrn=1v	IL-4 97.5CTD-2V	IL-4 104,7CID-2V	IL-4 121,7cID-1V	IL-4 121.7CID-2V	7-117- 3-1	12-32-521 7-11 7-12-6-521	II-4	11 -6 11 -6	7-30-27 V-9	Jacob-27	V-8 34hrth_2v	V-8 340CTD-AU	V-8	400cm-27

4-7

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P261	A7 007 8-A				< <	« « « « «	<
	V-8 360 4V		<	<	۷ ۷	< < < < <	<
	V-8 360 2V		<	<	< <	< < < < <	
	7-8 318 4V		<	<	4 ∢	< < < < <	
	V-8 318 2V		E / Y	A/M	4 4	A	
	IL-6 225 2V		E >	N/N		A/M A/N A/N A/N	
	116 I 225 1V		A/M A/H	A/A		< <	
	L-4 55.7	M/A M/A					
	11,-4 II	A/H A/H A/H	 				
	114 21. 7	А/н					
	1L-4 1L-4 121. 7 121. 7 1V 2V	R/V	 				
	104.7 11 2V	, ×	-				
	-4 10 10 10 10 10 10 10 10 10 10 10 10 10						
	IL-4 IL-4 97.5 97.5 1V 2V	A/M A/M A/N A/M A/M A/M A/M A/M					
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	318 2V		A/M	A/M	<	< < × × × ×	< <
	1L-6 225 2V		A/M	А/н		< <	
	1L-6 225: 1V		W/W	W/W			
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	007 007				<	< <	< < <
	V-8 400 2V				<	·< <	< < <
9261	7-8 360 4V		<	< '	<	∢ ∢	< < <
	V-8 360 2V		<	<	<	4 4	< < <
	V-8 318 2V		A/A	Σ × V	<	A / M	< <
	1L-6 225 1V		A/M	A/M A/M		A/M	
	A5 6440 8-A						< < <
	V-8 400 4V				4	e e	<
	V-8 400 2V				<	< <	< < <
1975	V-8 360 4V		<	4		-	
	V-8 360 2V				∢	4 4	< < <
	V-8 318 2V		A/N	A/M	∢	A /N	4 4
	1L-6 V-8 V-8 225 318 360 1V 2V 2V		A/M	A/H A/H		K/V	
CHRYSLER 1975-1978	ENCINE TYPE C.I.D. CARB. BBL.	SUBORIT ARBOW COLT SAROW TOUT SAR	-COMPACT- ASPEN '76 DART	VALIANI VOLARE '76	-INTEREDIATE- CHARGER S.E. MACNUM XE 178	CORDOBA DIPLOMAT '77 CORONET/FURY LE BARON '77	-FULL SIZE- CHRYSLER GRAN FURY MONACO ROYAL MONACO

A = AUTOMATIC TRANSMISSION
N = MANUAL TRANSMISSION

FIGURE 4-4. CHRYSLER AUTOMATIC VS MANUAL TRANSMISSION AVAILABILITY, 1975-78

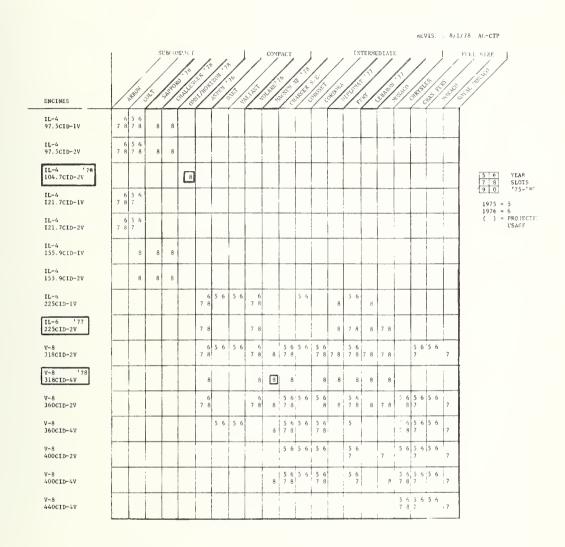


FIGURE 4-5. CHRYSLER CALENDAR OF MODEL/ENGINE COMBINATIONS, 1975-78



5. AMERICAN MOTORS CORPORATION

5.1 SUMMARY

American Motors in recent years has had only four models on the market which, in 1978, used six engines and four transmissions (three manual and one automatic). For 1979 AMC is purchasing the Chrysler lock-up torque converter for use with Chrysler's automatic transmission and AMC's 304 CID V-8 engine. The intermediate size Matador is being dropped for 1979 and with it the 360 CID V-8 engine, which will make the 304 CID V-8 the largest engine used by AMC. In 1980 AMC intends to drop the 4-cylinder Audi engine currently used and purchase the Pontiac 151 4-cylinder engine in its place. The latter engine is currently available in several configurations and it is not known at this time which one or more versions AMC might use.

Capital is not available for AMC to operate extensive research and development facilities. As a result, it is highly dependent on outside suppliers for technological advances, especially in the engine/drivetrain area. AMC intends to purchase from other suppliers most of the technology it needs to meet the future emission and fuel economy standards, as exemplified by its purchase of the Chrysler lock-up torque converter and the Pontiac engine. Transversely mounted engines and transaxles may be purchased by AMC in the 1980's in order to introduce a front-wheel-drive mini car. See Volume I, Master Product Schedules, for a more detailed discussion of AMC's advanced product plans.

The detailed information worksheets (Engine-Transmission-Rear Axle Product Schedule) for American Motors are found in Appendix D. The summary charts are described in Sections 5.2 through 5.6 (Figures 5-1 through 5-5).

5.2 ENGINES IN PRODUCTION (Figure 5-1)

This figure displays the use of all AMC engines from 1975 through 1979. Engine description includes: type, size (in CID), and fuel metering (number of carburetor barrels). Of the eight engines listed for use during this period only the Audi 121 CID

4-cylinder engine was new. In 1975, the 401 CID V-8 was dropped; in 1976 the 360 CID 4-barrel V-8 was dropped. The 360 CID 2-barrel V-8 engine was dropped at the end of the 1978 model year along with the Matador. The Page Numbers shown next to the engine descriptions refer to the worksheets in Appendix D, Figure D-1.

5.3 TRANSMISSIONS IN PRODUCTION (Figure 5-2)

This chart depicts the transmission usage for AMC from 1975 through 1978. Bold outlining highlights the introduction year for new transmissions. Eight manual transmissions are listed but only three of them were used in 1978 along with one automatic transmission. The automatic transmission (named Torque-Command) is purchased from Chrysler and will be fitted with Chrysler's lock-up torque converter for 1979 when used with AMC's 304 CID V-8 engine. Four new manual transmissions have been introduced since 1976. These have generally been replacements for previously discontinued transmissions. One four-speed manual was specifically introduced in 1978 for use with the 121 CID 4-cylinder Audi engine. In addition, only one other four speed and one three speed manual were available in 1978. The varied list of transmission manufacturers attests to the large number of suppliers used by AMC over the years.

5.4 CALENDAR OF ENGINE/TRANSMISSION COMBINATIONS (Figure 5-3)

This chart matches the different engines and transmissions in use from 1975 through 1978. Using the same format as GM (see Section 2.4), engine and transmission descriptions are consistent with those given in Figures 5-1 and 5-2 (Engines and Transmissions in Production).

The primary point brought out by this chart is that AMC has only one automatic transmission which it uses for all of its engines. As a result, this one automatic cannot be efficiently utilized to accommodate the varying load requirements of all its engines. Additional weight could be removed from selected models (and fuel economy increased) if more automatic transmissions were available which more closely matched the requirements of each engine/model combination.

5.5 AUTOMATIC VS. MANUAL TRANSMISSION AVAILABILITY (Figure 5-4)

This is a convenient summary of the availability of manual and automatic transmissions for each model/engine combination recognizing that in many combinations only one transmission type is offered. Using the same format as Ford (see Section 3.5) engine descriptions are consistent with those given in Figures 5-1 and 5-3.

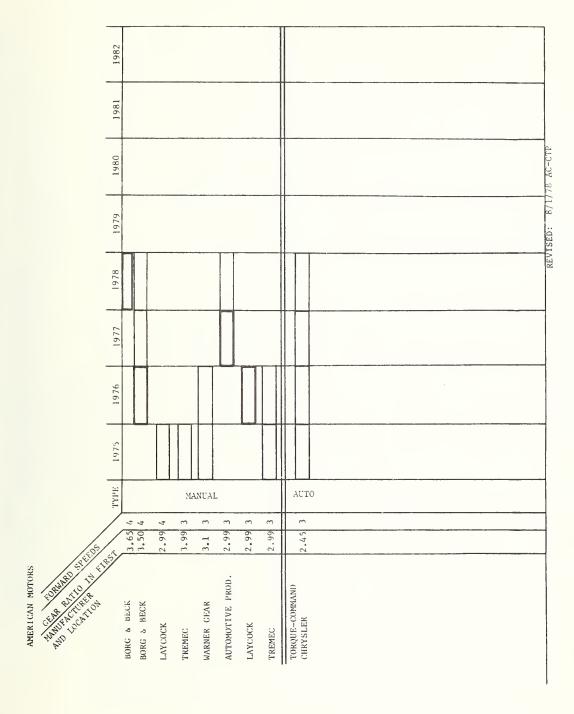
Several observations can be made from this data. The use of manual transmissions with V-8 engines was discontinued in 1977 making the automatic transmission the only one available with V-8 engines. The use of a manual transmission with the 6-cylinder engine on the Matador was also discontinued in 1977 so the Matador could only be purchased with an automatic transmission. These changes were made primarily due to emission requirements (see discussion in Section 3.5). In 1978 the Pacer was offered with a 304 CID V-8 engine and automatic transmission for the first time. The new 121 CID 4-cylinder Audi engine was added to the Gremlin in 1977 with both automatic and manual transmissions as a means of boosting fuel economy. The Concord is scheduled to receive this engine in 1979, also to help fuel economy.

5.6 CALENDAR OF MODEL/ENGINE COMBINATIONS (Figure 5-5)

Using the same format as GM (see Section 2.6), this chart illustrates that AMC is following a trend to the use of smaller engines as a means of improving their corporate average fuel economy (CAFE). The primary examples of this are the discontinuance of the 304 CID V-8 on the Gremlin in 1976 and the addition of the 121 CID 4-cylinder engine in 1977.

	AMERICAN MOTORS								
_	ENGINE	1975	1976	1977	1978	1979	1980	1981	
PG								1301	
1.	IL-4 121CID-2V		NEW				'		
	IL-6 232CID-1V								
3.	IL-6 258CID-1V	AVATIANT							
4.	IL-6 258CID-2V	AVAILABLE NOT USED	/						
6.	V-8 304CID-2V								
	V-8 360CID-2V								
7.	V-8 360CID-4V								
	V-8 401CID-4V								
	-								
			Re	evised: 8/	′1/78 AC-C	TP			
		•							

FIGURE 5-1. AMERICAN MOTORS ENGINES IN PRODUCTION, 1975-79



AMERICAN MOTORS TRANSMISSIONS IN PRODUCTION, 1975-78 FIGURE 5-2.

3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	100	9 0 175-180	1976 = 6, ETC. () = PROJECTED	USAGE					
E 6 JONGTON	8 4	οω	\$ \$	9 80	9 80	9 8	9		
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2404 2404 2404 2404 2404 2404 2404 2404	_	_		7					
	8								
		J							
FORWARD SPEEDS GEAR RATIO IN FIRST MANUFACTURER LOCATION ENGINE	IL-4 121CID-2V	IL-6 232CID-1V	IL-6 258CID-1V	IL-6 258CID-2V	v-8 304CID-2V	V-8 360CID-2V	V-8 360CID-4V	V-8 401CID-4V	
				5	6				

FIGURE 5-3. AMERICAN MOTORS CALENDAR OF ENGINE/TEANSMISSION COMBINATIONS, 1975-78

Revised: 8/1/78 AC-CTP

					١
	V-8 360 2V			∢	4004
	V-8 304 2V		4 4		04/1
	1L-6 258 2V	A/M	A/M A/M	∀	0 / 1
	1L-6 I 258 2 1V 2	A/M A	A/M A		0.11/70 AC.L.C.
1978	1L-6 1	A/M	A/M A/M		6
	121 2: 2V 11	A/M A	से से		
	2 1 1	<			1
-	V-8 360 2V			∢.	
	V-8 V 304 3 2V 2		A	4	
1977	1L-6 258 2V	A/M	A/M A/M		
19	1L-6 1 258 2 1V 2	A/M	A/M A/M	A	
	1L-6 1 232 2 1V 1	A/M A	A/M A		
	121 2v	A/M			l
	V-8 I 360 1 4V 2	4		<	1
	V-8 360 2V			⋖	1
	V-8 304 2V	A/M	A/M	4	1
1976	IL-6 258 2V	Ж	M/M		1
1	1L-6 I 258 2 1V 2	A/M	A/M A/M	A/M	1
	1L-6 232 1V	A/M	A/M A/M		1
	V-8 401 4V			∢	
	V-8 360 4V			<	
	V-8 360 2V			A	
1975	V-8 304 2V	A/M	A/M	Ą	
	1L-6 1L-6 258 258 1V 2V				
	1L-6 258 1V	A/M	A/M A/M	A/M	
	1L-6 232 1V	A/M	A/M A/M]
AMERICAN MOTORS 1975-1978	ENGINE C.I.D. CARB. BBL.	BCOMPACT+- REMLIN	-COMPACT- HORNET (CONCORD '78) PACER '75	-INTERMEDIATE- MATADOR	
AMERI	ENC C.1 CARB.	MODEL CI	S = [4]	NI-	

A = AUTOMATIC TRANSMISSION M = MANUAL TRANSMISSION

FIGURE 5-4. AMERICAN MOTORS AUTOMATIC VS. MANUAL TRANSMISSION AVAILABILITY, 1975-78

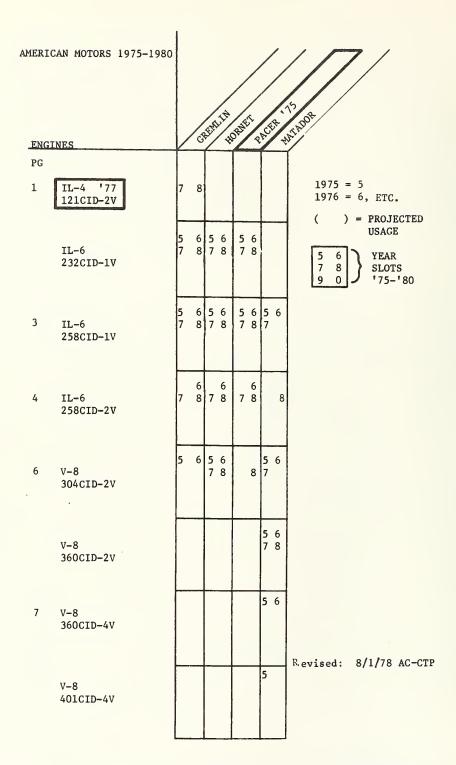


FIGURE 5-5. AMERICAN MOTORS CALENDAR OF MODEL/ENGINE COMBINATIONS, 1975-78

APPENDIX A

GENERAL MOTORS ENGINE-TRANSMISSION-REAR AXLE PRODUCT SCHEDULE

TABLE A-1. NOTES FOR GENERAL MOTORS ENGINE-TRANSMISSION-REAR AXLE PRODUCT SCHEDULE

Footnotes:

- (a) Not available in California
- (b) Not available in high altitude
- (c) California only
- (d) High altitude only
- (e) Manufacturing option
- (f) Except station wagons
- (g) Station wagons only
- (h) Police option
- (i) Trailer option
- (R) Reverse

General Notes:

- (1) All axle ratios may not be available with air conditioning and some ratios are only available with air conditioning.
- (2) Some engine-driveline combinations may not be available with all series of each model.
- (3) Not all axle ratios are available with Positraction.

-	_			
		CAR		
	1980	TOS AXLE		
		DRIVELINE RATIOS TRANSMISSION AXI		
REVISED: 8/1/78 AC-CTP		CAR		
REV	1979	TIOS		
	-	ORIVELINE RATIOS TRANSMISSION AXL		
		CAR MODELS		CHEVE TT
	1978	TIOS		3.70
		ORIVELINE RATIOS TRANSMISSION AXI	(DISCONTINUED)	4- 3.75 SPEED 1.36 1.00 1.00 1.82(R)
		CAR	CHEVETTE CHEVETTE	3113VETTE
	1977	TOS	4.11	(b) 3.70 4.11 (c) 3.70 4.11
	1	DRIVELINE RATIOS TRANSMISSION AND	4- 3.75 5PEED 2.16 (b) 1.38 (c) 1.00 (a) 1.00 (a) 1.00 3.82(R) 3- 2.74 (c) 1.50 (c) 1.57 (d) 1.50 (e) 1.57	3.75 2.16 1.38 1.00 3.82(R) 2.74 1.57 1.00 2.07(R)
~		CAR MODELS	SORC 6 BESK CHEVETTE SPEED (1) (1) (2) (3) (4)	GREVETTE GREVETTE GREVETTE GREVETTE GREVETTE SPEED GREVETTE
MODEL YEAR	1976	TIOS	(a) 4.11 4.11	3.70 4.11 (a) 3.70 4.11
)());		DRIVELINE RATIOS TRANSMISSION AND	SPEE 2.16 SPEE 2.16 1.00 3.82(R) 5- 2.74 SPEE 1.57 SPEE 1.57	SPEED 2.16 1.00 1.00 2.07(R) 2.07(R)
		CAR		
	1975	TOS		
PAGE I		ORIVELINE RATIOS TRANSMISSION AND		
CENERAL MOTORS	321223	TYPE AND SIZE (TRANS, TYPE)	(ATO)	(ANTAL) (YANUAL) (ANTAL) (ANTAL) (ANTAL) (ANTAL)

FIGURE A-1. GENERAL MOTORS ENGINE-TRANSMISSION-REAR AXLE PRODUCT SCHEDULE, 1975-80

ſ	-				
		CAR			
C-CTP	1980	TOS			
8/1/78 A	-	TRANSMISSION AND			
REVISEO: 8/1/78 AC-CTP		ORIVE			
RE		CAR			
	1979	SOL			
		ORIVELINE RATIOS			
F		CAR	GREVETTE	CHEVETTE	3113.63
	1978	10S		2 11	3.70 CH
		DRIVELINE RATIOS	E E	3.75 2.16 1.38 1.00 3.82(R)	40 48 00 92(R)
		DRIVE	3- 2 40 SPEED 1.46 1.02	SPEED (b)	3- SPEED 1. (b) 1.
		CAR			
	1977	10S AXLE			
		DRIVELINE RATIOS TRANSMISSION AXLE			
		DRIVE		. 1	
		CAR			
MODEL YEAR	1976	AXLE			
M00I		ORIVELINE RATIOS TRANSMISSION AXLE			
		ORIVE			
		CAR			
	1975	10S AXLE			
	-	ORIVELINE RATIOS TRANSMISSION AXLE		1	
PAGE 2		ORIVE			
GENERAL MOTORS	ENGINE	(TRANS, TYPE)	(AUTO) (AUTO) (AUTO) (1.62) (1.62) (1.62) (1.63) (1.64) (1.64) (1.64) (1.64) (1.64) (1.64) (1.64) (1.64) (1.64) (1.64)	(AUFO)	8/61, NI /6/8

FIGURE A-1. GENERAL MOTORS ENGINE-TRANSMISSION-REAR AXLE PRODUCT SCHEDULE, 1975-80 (CONTINUED)

		CAR							
REVISED: 8/1/78 AC-CTP	1980	DRIVELINE RATIOS TRANSMISSION AXLE							_
au		CAR		•					
	1979	DRIVELINE RATIOS TRANSMISSION AXLE	II .		 				
		CAR		OPEL	OPEL	OPEL			
	1978	LTOS AXLE		3.583	3.308	3.583			
		DRIVELINE RATIOS TRANSMISSION AXI		4- SPEED 3.51 2.18 1.42 1.00 1.00	5- SPEED 3.51 2.18 1.42 1.00 0.86 3.78(R)	3- SPEED 2.74 1.57 1.00 2.07(R)			
		CAR		OPEL BY ISUZU	DATKIN OPEL 8Y ISUZU	OPEL SY 1SUZU			
	1977	AXLE		3.583	3.583	3.583			
	51	ORIVELINE RATIOS TRANSMISSION AXL	N S S S S S S S S S S S S S S S S S S S	4- 3.51 SPEE0 2.18 1.42 1.00 3.83(R)	S- 3.51 SPEED 2.18 1.42 1.00 0.86 3.78(R)	TIC 200 3- 2.74 SPEE0 1.57 2.07(R)	(DISCONTINUED)	(OISCONTINUEO)	
2		CAR MODELS		OPEL BY ISUZU		TURBO-HYDRAMATIC 200 GPEL BY 3.545 ISUZU SPEEO		VEGA	V1.6A
MODEL YEAR	1976	ATIOS AXLE		3.545				2	4.10
¥		ORIVELINE RATIOS TRANSMISSION AXL		4- 3.51 SPEED 2.18 1.42 1.00 1.00		3- 2.74 SPEE 1.57 1.00 2.07(R)	CHEVROLET	SPEED 2.20 1.47 1.47 1.00 3.11(R) 5- 5- 5- 3.41 SPEED 2.08	1.40 1.00 0.80 3.36(K)
		CAR						<u>k</u> 	
	1975	TIOS							
PAGE 3		DRIVELINE RATIOS TRANSMISSION AXLE		 		! !			
GENERAL MOTORS	FACTINE	TYPE AND SIZE (TRANS, TYPE)	110.8CID-2V (1.8 %) (1.8 %)	(TANDARIA)	(MANUAL)	(AUTO)	1L-4** 122CID-FI (2.02) LY3 (GHEVY)	(HANUAL)	*NEW IN 1976

FIGURE A-1. GENERAL MOTORS ENGINE-TRANSMISSION-REAR AXLE PRODUCT SCHEDULE, 1975-80 (CONTINUED)

		R :LS		
		CAR		
AC-CTP	1980	RATIOS N AXLE		_
8/1/18		DRIVELINE RATIOS TRANSMISSION AXI		
REVISED: 8/1/78 AC-CTP	_	DRI		_
RE		CAR		
	6	ω.		_
	1979			
		DRIVELINE RATIOS TRANSMISSION AXL		
				-
		CAR MODELS		
	1978	AT LOS AXLE		
		ORIVELINE RATIOS TRANSMISSION AXI		
		ORIV TRAN		
		CAR		
	77	14		_
	1977		(MUED)	
		DRIVELINE RATIOS TRANSMISSION AXI	(DISCONTINUED)	
				_
24		CAR	VECA ASTRE SUNBIRD SUN	
MOOEL YEAR	1976	ATIOS AXLE	2.92 2.92 2.92 2.92 2.92 2.92 3.92 3.92 3.92 3.92 3.92 3.92 3.92 3.92 3.92 3.92 3.92 3.92 3.92 3.92 3.92 3.93	
ž		DRIVELINE RATIOS TRANSMISSION AXLE	CHEWROLET 1. 3.11 2.92 Wg SPED 1.84 3.22 (R) 2.92 Wg SPED 1.18 2.92 Wg SPED 2.16 2.10 2.92 Wg SPED 2.16 2.10 2.22 Wg SPED 2.16 2.10 2.22 Wg SPED 1.10 3.22 Wg SPED 1.00 3.22	
	_	DRI	CHEVROIT 13- SPEED (a) 14- SPEED (b) 13- SPEED (a) 13- SPEED (a) 13- SPEED (b) 13- SPEED (c)	_
		CAR	ASTRE ASTRE ASTRE ASTRE ASTRE	
	1975	OS AXLE	2.92 VEGA 2.92 VEGA 2.92 VEGA 2.92 VEGA 2.92 VEGA 2.92 VEGA	_
	19	DRIVELINE RATIOS TRANSMISSION AXLE	2.2.0.00 (R) 2.3.00 (R	
PAGE 4		DRIVEL TRANSMI	SPEED 1.30 1.11 SPEED 1.84 (a) 1.20 (R) 3.22 (R) 3.11 (R) 3.	
GENERAL MOTORS	P	SIZE (PE)	(MANUAL) (MANUAL) (MANUAL) (MANUAL) (MANUAL) (MANUAL)	*DROPPED IN 1978
GENERAL	TWOTATE	TYPE AND SIZE (TRANS. TYPE)	(MANU) (MANU) (MANU) (MANU) (MANU) (AUI) (CHEVY) (AUI) (CHEVY)	DROPPED
		T)	Δ-5	*

FIGURE A-1. GENERAL MOTORS ENGINE-TRANSMISSION-REAR AXLE PRODUCT SCHEDULE, 1975-80 (CONTINUED)

F	7						
		CAR					
E.	2	ш					
AC	1980	6				***************************************	
REVISED: 8/1/78		ORIVELINE RA TRANSMISSION					
REVISED	-						
		CAR					
	1979	ATIOS					
		ORIVELINE RATIOS TRANSMISSION AXL					
		ORIV			·		
		CAR					
	_	щ				· · · · · · · · · · · · · · · · · · ·	
	1978	(ma)	пео)	ueo)	(UEO)		
		ORIVELINE RATIOS TRANSMISSION AXI	(OISCONTINUEO)	(OISCONTINUEO)	(OISCONTINUEO)		
-	-	-	(c) (d)	(c) (d)		4	
		CAR	VEGA ASTRE MONZA CSUNBIRD	VEGA MONZA ASTRE (C SUNBIRD	ASTRE VECA b) MONZA SUNBIRD (4)		
	1977	TIOS	(b) 3.42 3.42 3.42 3.42 (b) 2.93	3.42	(b) 2.92 3.42 3.42 3.42		
		DRIVELINE RATIOS TRANSMISSION AXL	3.11 2.20 1.47 1.00 3.11(R)	3.40 2.08 1.00 0.80 3.36(R)	2.52 1.52 1.00 1.93(R	(OISCONTINUEQ)	
		DRIVE	4- SPEED	SPEEO (b)	3 SPEE0	(01800	
		CAR MODELS			(1)	LRO .	
EAR			2 VECA 2 MONZA 3 ASTRE	3 VECA 2 MONZA 3 ASTRE	50 2 VECA 3 MONZA 2 3 ASTRE 2 ASTRE	2 SUNBIRO	
MODEL YEAR	1976	RATIOS ON AXLE	2.92 2.92 2.93 (R)	2.93 3.42 2.93 (R)	WATIC 350 3.42 2.93 3(R) (a) 3.42 2.92	3.11 3.11 1.00 3.22(R)	
		ORIVELINE RATIOS TRANSMISSION AXI	CHEVROLET 4-3.75 2PED 2.16 1.36 1.00 3.82(R)	CHEVROLET 5- 3.41 SPEED 2.08 1.00 0.80 1.00 0.80 3.36(R)	TURBO HYORAVATIC 350 3.42 3.42 3.42 3.42 1.03 1.93(R) (2.92 1.93(R) (3.42) 2.92	CHEVROLET 3-11 SHEED 1.06 3.22	
-			CHEVROI 4- SPRED	CHEVRO	TURBO H	CHEVROI 3- SPEED	
		CAR	VECA ASTRE MONZA VECA (d) MONZA ASTRE	1	VECA ASTRE MONZA ASTRE VECA (d) MONZA ASTRE		
	1975	105 AXLE	3.42		2, 92 VB NS NS N		
	3	DRIVELINE KATIOS TRANSMISSION AXLE	.11 .20 .47 .00	1	2		
PAGE 5		DRIVE	4- 3.11 SPEED 2.20 1.47 1.00 3.11(R)	 	8- 2.52 SPEED 1.52 1.00 1.93		
_	18	SLZE YPE)	NUAL)	(MANUAL)	(ott)E)	TPUT (GREVY) (YANUAL)	- 37K IN 1976 - Dissipile IN 1977
OLNI KAL BOLORS	ENGLER	(TRANS, TYPE)	(MA)	0		H=48 C=30 H=30 orrer (GRVY) (MANCAL)	SEE IN DESCRIPTION
		45					*

FIGURE A-1. GENERAL MOTORS ENGINE-TRANSMISSION-REAR AXLE PRODUCT SCHEDULE, 1375-80 (CONTINUED)

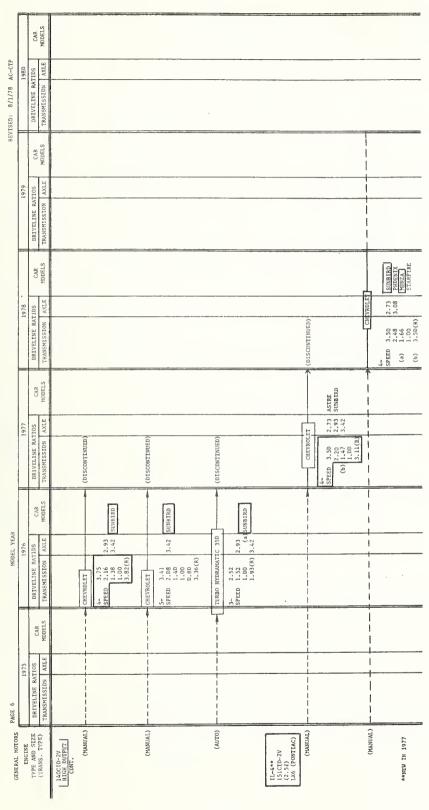


FIGURE A-1. GENERAL MOTORS ENGINE-TRANSMISSION-REAR AXLE PRODUCT SCHEDULE, 1975-80 (CONTINUED)

1				
		CAR		
	1980	AXLE		
AC-CIP		DRIVELINE RATIOS TRANSMISSION AXL		
REVISED: 8/1/78 AC-CTP		CAR		
REV	1979	TIOS		
		DRIVELINE RATIOS TRANSMISSION AXI		
		CAR	3.23 SUNGEED 3.23 STARFIEE 3.23 FARFIEE 3.24 PHOENIX 5.79 NUMBER 5.70 NUMBER 5.70 NUMBER 5.70 NUMBER 5.70 NUMBER 5.70 NUMBER 5.70 NUMBER 6.70 NUMBER 6	STARFIRE
	1978	AXLE	3.40 2.08 3.23 [SINBERI 1.00 3.36 (R) 3.36 (R) 3.36 (R) 2.74 2.74 2.74 2.74 2.74 2.74 2.74 2.74 2.74 2.74 2.73 ENRETI 1.57 2.74 2	STARFI 2,93 MONZA
		DRIVELINE RATIOS TRANSMISSION AXI	SPEED 2.76 SPEED 2.77 SPEED 1.57	4- 3.50 SPEED 2.48 (c) 1.66 2 1.00 3.50(R)
		DRIVI	(a) (b) (c) (c) (c) (c) (d) (d) (d) (d) (d) (d) (d) (d) (d) (d	4- SPEED (c)
		CAR	ASTRE SUNGIED VENTURA ASTRE SUNGIED (b) VENTURA (a) (b)	
	1977	AXLE	2. 2. 3. 4.2.	
		DRIVELINE RATIOS TRANSMISSION AXL	CHEVROLET 3-60 2-5-5-5-5-5-5-5-5-5-5-5-5-5-5-5-5-5-5-5	
		CAR		
MODEL YEAR	1976	TOS AXLE		
MODI	1	DRIVELINE RATIOS TRANSMISSION AXI		
		CAR		
	1975	AXLE		
PAGE 7	1	DRIVELINE RATIOS TRANSMISSION AXI		
GENERAL NOTORS P	EXCINE	ZE E)	(AUTO) (A	WEN FOR 1978

FIGURE A-1. GENERAL MOTORS ENGINE-TRANSMISSION-REAR AXLE PRODUCT SCHEDULE, 1975-80 (CONTINUED)

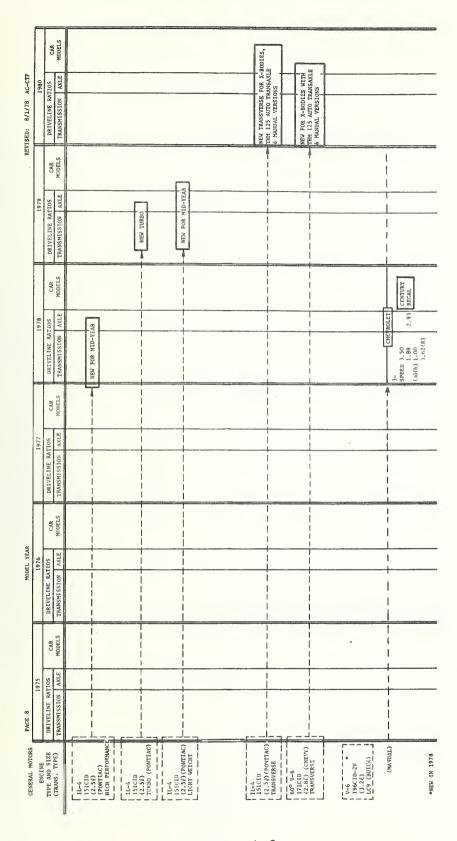


FIGURE A-1. GENERAL MOTORS ENGINE-TRANSMISSION-REAR AXLE PRODUCT SCHEDULE, 1975-80 (CONTINUED)

CAR REVISED: 8/1/78 AC- CTP DRIVELINE RATIOS
TRANSMISSION AXLE CAR MODELS TRANSMISSION AXLE 1979 CAR CENTURY RECAL MONZA MALIBU MONZA 2.56 MONZA 2.73 2.73 2.73 DRIVELING RATIOS
TRANSMISSION AXLL 1978 3-SPEED 3.50 (a) 1.89 2.7 (b) 1.00 3.62(R) CHEVROLET 4-SPLED 3.50 (b) 2.48 (a) 1.66 1.00 3.50(R) 5- 3.40 SPEED 2.08 (a) 1.39 (b) 1.00 (b) 3.36(R) 3-SPEED 2.52 (a) 1.52 (b) 1.00 1.93(R) THM 350 CAR MODELS DRIVELINE BATIOS
TRANSMISSION AXLE 1977 CAR SODEL YEAR ORIVELINE RATIOS
TRANSMISSION AXLE 1976 CAR DRIVELINE RATIOS
TRANSMISSION AXLE 1975 PACE 9 (AUTO) GENERAL MOTORS (MANUAL) (PIANUAL) ENGINE TYPE AND SIZE (TRANS. TYPE) V-6* (CONT) 196CID-2V (3.2?) LC9 (BUICK) V-6* 2000:10-2V (3.3*f*) L26 (CHEVY) *NEW IN 1978

FIGURE A-1. GENERAL MOTORS ENGINE-TRANSMISSION-REAR AXLE PRODUCT SCHEDULE, 1975-80 (CONTINUED)

	7		Г			-													-/	
بع		CAR																		
/78 AC-CT	1980	RATIOS A AXLE																		
REVISED: 8/1/78 AC-CTP		DRIVELINE RATIOS TRANSMISSION AXL																		
REVIS						Ţ				-		-								
		CAR		 		 -														
	1979	RATIOS IN AXLE				j														
		DRIVELINE RATIOS TRANSMISSION AXI		 																
		CAR		ALIBU SW	ò		MALIBU (f)										,,,,,,	-		
	1978	24	000		2.73	350												_		
		DRIVELINE RATIOS TRANSMISSION ANL	000 NULL	2,74	(a) 1.57 (b) 1.00 2.07(R)	THM 350	2.52	(b) 1,00 1,93(R)		(DISCONTINUED)					(DISCONTINUED)					
		DRIVE		3-SPEED	<u>3</u> 3		3-SPEED	((DISCON					(DISCON			_		
		CAR	i			1				1	CENTURY (f)	SKYLARK	FIREBIRD LEMANS(f) VENTURA	OMEGA	1	SKYHAWK(b)	SUNBIRD(b)	3.08 CUTLASS(f)	2.56 STARFIRE	
	1977	AXLE				†				1	3.08	3.08 (a) 3.23 (c)	3,08 (a) (b) (c) (c)	3.08 (2.56		2.93	2.93 2.56 (a)		2,56 8	
		DRIVELINE RATIOS TRANSMISSION AXLE	İ								3-SPEED 3.11	1.84 1.00 3.22(R)				4-SPEED 3.11	2.20 1.47 1.00	(W) 44 F		
-	1					+				+					1		r u	-	-	
SAR		CAR									CENTURY (f) SKYLARK					SKYHAWK SUNBIRD				
MODEL YEAR	1976	RATIOS ON AXLE				+				CHEVROLET	3.08				CHEVROLET	2.56 (a)				
		DRIVELINE RATIOS TRANSMISSION AXL									3-SPEED 3.11	1.84 (a) 1.00 3.22(R)				4-SPEED 3.11	2.20 1.47 1.00			
=		CAR			**	-				1	CENTURY (f) 3 SKYLARK					SKYHAWK STARFIRE				÷.
	١,	ьí				1				+	2,73 CENT SKYI				+	2.56 SKYH				
	1975	DRIVELINE RATIOS TRANSMISSION AXL				 				+		84 00 22(R)			†		2,20 1,47 1,00 3,11(R)			_
PAGE 10		DRIVELINE RAT									3-SPEED	1.84 (a) 1.00 3.22(R)				4-SPEED	2116			
	FNULNE AVO STZE	(344)	(31.10)			(AUTO)				(MANUAL)					(MANUAL)					1978.
	FACINE AVE	(TRANS. 17PE)	L26 (r.aV3)						V-6 * 231CID-2V (3.8?)	(BUICK)					Ü					*DROPPED IN 1978. NEW 13 1975
			F79						231C	LD7										ic*

FIGURE A-1. GENERAL MOTORS ENGINE-TRANSMISSION-REAR AXLE PRODUCT SCHEDULE, 1975-80 (CONTINUED)

		CAR	
AC-CTP	1980	TOS AXLE	
/78 AC	1	NE RAT	
REVISED: 8/1/78		DRIVELINE RATIOS TRANSMISSION AXLE	
REVISE	_		
		CAR	
	1979	rios Axle	
		DRIVELINE RATIOS RANSMISSION AXL	
		DRIVELINE RATIOS TRANSMISSION AXLE	
		CAR	
			•
	1978	AT TOS	
		DRIVELINE RATIOS TRANSMISSION AXI	(DISCONTINUED)
		DRIV	00310)
		CAR	CUTLASS (f) SWRIND(b) SUNBIRD(b) STARFIRE STARFIRE SKYLARK LESABRE (f) LESABRE
	1977	RATIOS N AXLI	(ii) 3.08 (iii) 1.08 (iv) 2.55 (iv)
		DRIVELINE RATIOS TRANSMISSION AND.E	ED 3.10 1.1.23 1.1.23 1.1.33 1
		TRAN	5-SPEED 3-S
		CAR MODELS	STARFIRE STARFIRE STARFIRE STARFIRE STARFIRE STARFIRE
EAK			
NUDEL YEAR	1976	RATIOS N AXLE	(R) 2.56 (R)
		DRIVELINE RATIOS TRANSMISSION AXI	355 552 552 552 652 653 653 653 653 653 653 653 653 653 653
		TRAS	3-5-8-8-8-8-8-8-8-8-8-8-8-8-8-8-8-8-8-8-
		CAR MODELS	CENTURY (f)
			2.7.7 CENTURY (f) 2.56 SKYLAKK SKTARK STARETRE
	1975	E KATTO	
PAGE 11		DRIVELINE RATIOS TRANSMISSION AXLE	3-SFPEED 1.52 1.00 1.93(R)
PACE		TR.	
TORS	FYCINE	(D SIZE TYPE)	CELNETAL)
CENERAL MOTORS	5.50	TYPE AND SIZE (TRANS, TYPE)	LDV ((CONT)
CENT			201

FIGURE A-1. GENERAL MOTORS ENGINE-TRANSMISSION-REAR AXLE PRODUCT SCHEDULE, 1975-80 (CONTINUED)

	CAR	
1980	DRIVELINE RATIOS TRANSMISSION AXLE	
	CAR	
1979	DRIVELINE RATIOS TRANSMISSION AXLE	
	CAR	MONIE CARLO SYKLARK SYKLARK GRAND PRIX TEMANS (7) PHOENIX OUTLASS (7) OUTLASS (7) OUTLASS (7)
1978	DRIVELINE RATIOS TRANSMISSION ANLE	
	CAR	SKYHAWK DELTA 88 (*) OWEGA STARFIRE
1977	DRIVELINE RATIOS TRANSMISSION ANDE	
1976	DRIVELINE RATIOS CAR TRANSMISSION ANLF MODELS	
	CAR	
PAGE 12 1975	DRIVELINE RATIOS TRANSMISSION AXLE	
GENERAL MOTORS	TYPE AND SIZE (TRANS. TYPE)	(AUTO) - (AUTO) - (AUTO) - (AUTO) - (AUTO) - (AUTO) - (AUTO) - (AUTO) - (AUTO) - (AUTOL) - (AUTO

FIGURE A-1. GENERAL MOTORS ENGINE-TRANSMISSION-REAR AXLE PRODUCT SCHEDULE, 1975-80 (CONTINUED)

	CAR MODELS	
1980	ATIOS AXLE	
9/1//8 AC-UIP	DRIVELINE RATIOS TRANSMISSION AXI	
NEVI SED.	CAR MODELS T	
6261		
61	DRIVELINE RATIUS TRANSMISSION AXLE	
	CAR	CETTER (4) (b CETTER (4) (b CETTER (4) (b CETTER (4) (c) (c) (d) (d) (d) (d) (d) (d) (d) (d) (d) (d
1978	RATIOS N AXLE	CHENYOLET PEEE PEEEE PEEEEE PEEEEE PEEEE PEEEEE PEEEE PEEEEE PEEEEE PEEEE
	DRIVELINE RATIOS TRANSMISSION AXLE	4-SPEED (CHEVR) 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0
	CAR	
1977	TIOS	
	DRIVELINE RATIOS TRANSMISSION AXLE	
	CAR MODELS	
9261	TIOS	
	DRIVELINE RATIOS TRANSMISSION AXLE	
	CAR	
1975	TOS AXLE	
Luck 13	DRIVELINE RATIOS TRANSMISSION AXLE	
SPICINE HOLDERS	TYPE AND SIZE (TRANS, TYPE)	(MANUAL) - (MANUAL) - (MANUAL) - (MUTO) -

FIGURE A-1. GENERAL MOTORS ENGINE-TRANSMISSION-REAR AXLE PRODUCT SCHEDULE, 1975-80 (CONTINUED)

	_			
		CAR		
CTP	1980	IOS		
/78 AC-	_	INE RAT		
REVISED: 8/1/78 AC-CTP		DRIVELINE RATIOS TRANSMISSION AXLE		
REVI		CAR		
	1979	TOS		
	-	NE RATI		
		DRIVELINE RATIOS TRANSMISSION AXLE		
		CAR	NALIBUENCE) (CHATARRECE)	
				.,
	1978	RATIOS N AXL	(R) (2.73 (C) (2.73 (C) (C) (C) (C) (C) (C) (C) (C) (C) (C)	
		DRIVELINE RATIOS TRANSMISSION AXLE	SPEED 2.74 1.57 1.67 2.07(R) 2.07(R) 2.07(R) 2.07(R) 2.07 (R) 2.52 (a) 1.52 (b) 1.03 (b) 1.03 (c) 1.03	
		DRI		· · · · · · · · · · · · · · · · · · ·
		CAR		
	1977	SC		
	16	CE RATE		
		DRIVELINE RATIOS TRANSMISSION ANDE		
	_			
		CAR		
MODEL YEAR	1976	N.E.		
YOUET	19	F RATIO		
		DRIVELINE RATIOS TRANSMISSION ANDE		
	_			· · · · · · · · · · · · · · · · · · ·
		CAR MODELS		
	1975	10S ANLF		
		NE RAT		
PAGE 14		DRIVELINE RATIOS TRANSMISSION ANDE		
	-			
MOFORS	:	DATE AND STREE (DRAYS, TYPE)		-
CENERAL MOTORS		EE		te. de to
õ			[1] [2] [2] [2] [3] [4] [4] [4] [4] [4] [4] [4] [4] [4] [4	

FIGURE A-1. GENERAL MOTORS ENGINE-TRANSMISSION-REAR AXLE PRODUCT SCHEDULE, 1975-80 (CONTINUED)

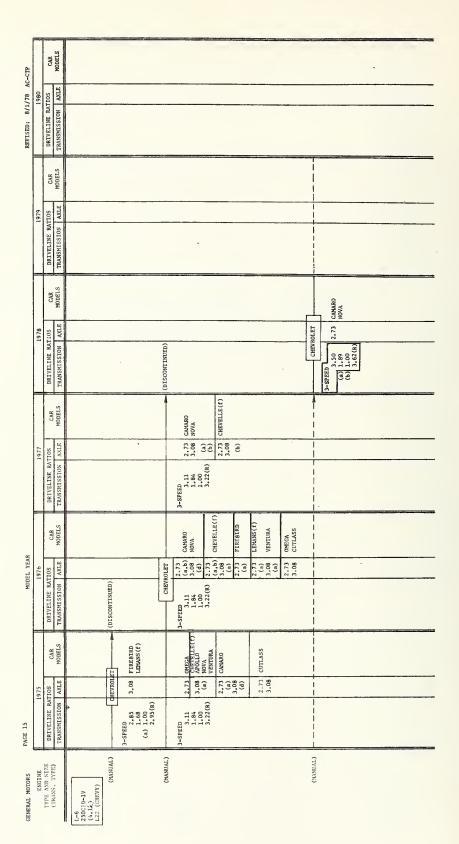


FIGURE A-1. GENERAL MOTORS ENGINE-TRANSMISSION-REAR AXLE PRODUCT SCHEDULE, 1975-80 (CONTINUED)

	6.0	MODELS		The second secon
0/1/0 AC-CIF	DRIVELINE RATIOS	TRANSMISSION AXLE		
NCV13507: 07177	040	MODELS		•
1070	AT10S	AXLE		
	DRIVELINE RATIOS	1RANSMISSION		NEW DIESEL
	GAD	MODELS	CAYARO NOVA NOVA	
10.78	ATTOS	ANTE	2.73	
	DRIVELINE RATIOS	TRANSMISSION	3-speed; 2, 25, 2, 25, 2, 25, 2, 25, 2, 20, 2, 20, 2, 20, 2, 20, 2, 20, 2, 20, 20	(DISCONTINUED)
		MODELS	CAYARO CHEVELLE(¢) CHEVROLET(¢) NOVA	CUILASS(f)
1977	VILOS	ANLE	3.08	OLET 2.73
	DRIVELINE RATIOS	TRANSMISSION ANDE	3-SPEED 2.52 1.52 1.00 1.91(R)	(DISCOMTINUED) 4-SPEED 1.10 1.47 1.47 1.47 1.47
		MODFIS	CAMARO CHEVELLE(f) OPECA CULLASS EFERERED LEMANS(f) VEYTURA NOVA	LEYANS (f) VENTURA
1074	MITOS	N ANI E	(R) (L) (L) (L) (L) (L) (L) (L) (L) (L) (L	3.08
	DRIVELINE RATIOS	TRANSMISSION	3-SPEED 1.32 1.00 1.91(R) 1.00 1.00 1.00 2.07(R)	CHEVROLET 3-SPEED 1.04 1.00 3.22(R)
	8 70	MODELS	OMECA APOLLO FIREBARD VENUBA COMAGO GHEVELLE(f) LEMANS(F) CUTLASS	OHEGA VENTURA (a)
1975	MATIOS	N AXLE	2.73 2.73 3.08 (d) 3.08 3.08	2.73
	DRIVELINE RATIOS	TRANSMISSION AXLE	3-SPEED 2.5.2 1.5.2 1.5.0 1.90 1.91 (R)	3-SPEED 1.04 1.04 1.08 1.08 1.08
OENEWAL FOLORS	ENCINE TYPE AND SIZE	(TRANS, TYPE)	(AUTO) (AUTO) (AUTO) (AUTO) (AUTO)	(4.35) 10.10590611E 10.10590611E (4.36) 1.08 (OLDS) (1.08 (OLDS) (4.36) (4.36) (4.36) (4.36)

FIGURE A-1. GENERAL MOTORS ENGINE-TRANSMISSION-REAR AXLE PRODUCT SCHEDULE, 1975-80 (CONTINUED)

	CAR					
1980	DRIVELINE RATIOS TRANSMISSION ANLE					
6261	DRIVELINE RATIOS CAR TRANSMISSION ANDE MODELS					
8261	BRANSHISE RALDS CAR IRANSHISETON AND: "00DELS	3- SPEED 3.40 (a) 1.39 (b) 1.00 (b) 1.00 3.46(8)	(DISCOUTIVIED)		9-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1	E-04(-0
1977	DRIABLINI KATIOS CAR TRANSMISSION AME WORLS		.HW.SULE SPEED .89 1.00 0.60 1.00 (8)	3- 2 52 2.73 CUTLASS(f) SPEED 1.00 1 91(8) 2.56 (2011	7- 2.74 3- 2.74 5- 2.74 5- 2.74 5- 2.07(R)	
197ь	DRIVELINE RATIOS CAR TRANSMISSION ASLE MODEL	(HEVMULT) 5- 3.41 (a) 5- 1.04 1.73 LEXAS(f) 1.00 2.73 VENTEA 0.80 3.56(8)		5-2.22 (a) 5-2.22 (b) 6-2.32 (c) 1.00 (c) 1.01 (c) 1.01 (d) 2.73 LFWIGHA (a) 3.08 LFWIGHA	OMEGA	(DISCONTINLED)
1975	ORIVELINE RATIOS CAR TRANSMISSION AXLE YOURTS			3- 2.52 2.56 APOLLO SPEED 1.32 SNYAAN 1.00 2.73 OPEGA (a) 2.56 VENTERA (c) EVENTERA	2.73	CHAULL) CHEVROLET 3- 3.11 2.73 NOVA SPEED 1.00 3.08 7.22(R) 3.08
ENGINE	TYPE AND SIZE (TRANS, TYPE)	(YANUAL)	(MANUAL)	(AUTO)	(AUTO)	(942) 262C10-2V (4,3) (4,1) (LVI (CHEVY) *NEW IN 1975,

FIGURE A-1. GENERAL MOTORS ENGINE-TRANSMISSION-REAR AXLE PRODUCT SCHEDULE, 1975-80 (CONTINUED)

1		CAR						
AC-CTP	0861	Тщ					· · · -	
REVISED: 8/1/78 AC-CTP	61	DRIVELINE RATIOS TRANSMISSION AXI						
RE	_	CAR			-			
	1979	TIOS	_					
		DRIVELINE RATIOS TRANSMISSION AXLE						
		CAR						2.29 Grand Prix 2.41 PREMERS(A) b. 2.56 PONTIAC(B)
	1978	FIOS						2.29
		DRIVELINE RATIOS THANSMISSION AXLE				Olsconfinie		3- 2,52 · SPEED 1,52 (a) 1,00 (b) 1 93(R)
		CAR					FIREBIRD VENTURA(a)	SE(f)
	1977	AXLE				2	3.23	2.41
		DRIVELINE EATIOS TRANSMISSION AXLE	(DISCONTINUED)		(DISCONTINUED)	CGCE	4- 2.85 SPED 2.02 (b) 1.35 1.00 2.85(R)	3- 2.52 SPEED 1.52 (a) 1.00 (b) 1.93(R)
×		CAR	MONZA	MONZA	MONZA			
NODEL YEAR	1976	N ANLE	2,93	2.93	(a) 2.56 (d) 2.93			
Z		DRIVELINE RATIOS TRANSMISSION ANDE	CHEVROLET 4- 3.11 SPEED 2.20 (b) 1.47 (b) 1.00 3.11(R)	5- 3.10 SPEED 1.89 (a) 1.27 (b) 1.00 3.06(R)	3- 2.52 SPEED 1.52 (a) 1.00			
		CAR MODELS	NONZA		MONZA			
	1975	CATTOS A AXLE	2,56 (d) 2,93		2.56 (d) (2.73 (d) (3.08	1		
PAGE 18		DRIVELINE RATIOS TRANSMISSION AXLE	4- 3.11 2 SPEED 2.20 1.47 2 1.00 3.11(R)		3- 2.52 SPEED 1.52 1.00 1.93(R)-	 		
GESTRAL MOTORS	ENCINE	(TRANS, 1YPE)	(AONUAL)		(ALIA)	V-831 301-71-21 (4.9.0) 1.27 (09371AC)		(AUTO)

FIGURE A-1. GENERAL MOTORS ENGINE-TRANSMISSION-REAR AXLE PRODUCT SCHEDULE, 1975-80 (CONTINUED)

-	_		_															
C-CTP		CAR	MODELS															
REVISED: 8/1/78 AC-CTP	1980	DRIVELINE RATIOS	TRANSMISSION AXLE											-				
		CAR	MODELS															
	1979	DRIVELINE RATIOS	TRANSMISSION AXLE															_
		CAR	MODELS				EMANS (f.)	(GRAND AM)				GRAND PRIX LEMANS(f) (GRAND AM)						
	1978	DRIVELINE RATIOS	TRANSMISSION AXLE	(DISCONTINUED)			2.29	(a) 1.00 (b) 2.07(R)			THM 200	3- 2.74 2.41 G SPEED 1.57 2.73 L (a) 1.00 (b) 2.07(R)	-	DICOMPRIEM				
	1977	DRIVELINE RATIOS CAR	TRANSMISSION AXLE MODELS	THM 400	3- 2.48 SPEED 1.48 2.56 GRAND PRIX (a) 1.00 (b) 2.08(R)	THM 200	2.41 PONTIAC(f)	(a) 1.00 2.56 POYTIAC(g) (b) 2.07(R)			4				3- 3.11 (a)(b) CAMARO SPEED 1.84 2.73 NOVA	3,22(R) 2.73 OFEGA		
MODEL, YEAR	1976		TRANSMISSION ANDE MODELS			1								THE THE THE	3- 3.11 (b) SPEED 1.84 (2.73 CAMARO	(a) 1.00 (d) 3.22(R) 3.08		
PAGE 19	1975	L.,	TRANSMISSION AXIE MODFLS											1				
GENERAL MOTORS	FNUME		(TRANS, T'PE)	L27 (CONT) (AUTO)		OTIV			V-8* 301C10-4V	(4.90) L37 (PONTIAC)	(Min)		N=-01 ##K-	(Cue)	(Trivour)			**NEW 1N 1978

FIGURE A-1. GENERAL MOTORS ENGINE-TRANSMISSION-REAR AXLE PRODUCT SCHEDULE, 1975-80 (CONTINUED)

	880	MODELS					<u> </u>						rk								
1980	SOI	AXLE																			
1980	DRIVELINE RATIOS	TRANSMISSION					-														
	gVD	MODELS	1			i I I															
1979	DRIVELINE RATIOS	TRANSMISSION AXLE									-										
	CAD	MODELS		OMECA (a) STARFIRE(a) MONZA MALIBU MONTE CARLO CUTLASS(f)	NOVA CAMARO FIREBIRD PHOENIX		CAMARO	TREBIRD	(a) (b) CHEVROLET(g) 2.56	11011	(f) (c)		MALIBU(g) LEMANS(g)	CUTLASS(g)(c)	MONZA		SUNBIRD(f)			LESABRE(f)	2.56(dCUTLASS 2.73(d) (f)(e) 2.29(c)
1978	L SOJ	AXLE		3.08 E	(a) N 3.08 C		9	2,41 F	(a) (b) C 2.56	(b)		2.73 (d) 2.56	(b) M	_	(b)	2.56	(a) (b) S	3.08	2.56	(c) L 2.41	2.56(d) 2.73(d) 2.29(d)
	DRIVELINE RATIOS	TRANSMISSION AXLE		4- 2.85 SPEED 2.02 (b) 1.35	2.85(K)		3- 2.52	SPEED 1,52 1,00		(a) NOVA(b)	3.00 (a b)	2.41 SKYLARK (a.b) OMEGA									
	OAD	MODELS		MONZA			CAMARO	CHEVELLE(f)		CHEVELLE(8)	CHEVROLET (B)	-112-1									
1977	TIOS	AXLE	13	2.73			2.56	(a)	2,56	(a) 2.73											
	DRIVELINE RATIOS	TRANSMISSION	CHEVROLET	4- 2.85 SPEED 2.02 (a) 1.35 (b) 1.00	2.85(R)	THM 350	3- 2.52	SPEED 1.52 (b) 1.00	1,93 (R)												
	CAB	MODELS		1			CAMARO		Т.	CHEVELLE(f)	TONIE CARLO										
1976	1108	AXLE					(b) 2,73	(q) 3.08	(a)(b)	2,73 (d)	80.5										
	DRIVELINE RATIOS	TRANSMISSION					3- 2.52 SPEED 1.52	1.00 1.93(R)													
	CAD	MODELS																			
1975	TIOS	AXLE				1															
	DRIVELINE RATIOS	TRANSMISSION AXLE				!															
ENCTAR	TYPE AND SIZE	(TRANS. TYPE)	LG3 (CONT)			(AUTO)															

FIGURE A-1. GENERAL MOTORS ENGINE-TRANSMISSION-REAR AXLE PRODUCT SCHEDULE, 1975-80 (CONTINUED)

F	_											*****	
		CAR											
:-CI.b	1980	TI0S AXLE											
REVISEO: 8/1/78 AC-CTP		ORIVELINE RATIOS TRANSMISSION AXL											
RE		CAR. MODELS									1		
	1979	ORIVELINE RATIOS TRANSMISSION AXLE											
		CAR MODELS		2.41 (b) CHE(F) (e) 2.29 (b) MALIBU(f) 2.73 (b) MONTE	d) LEMANS(f)	2.29(c) 2.73(c) CKAND PRIN 2.56(d) CUTLASS(f)	2.41(b) 3.08(a) PHOENIX	b) CENTURY(f)		CENTURY(f) REGAL CUTLASS(f)	CUTLASS(g)		
	1978	ANLE		2.41(b) 2.29(b) 2.73(b)	2.56	2.29	3.08	2.29(6)	2.30(2.29 2.73	2.41 2.73 2.29		
		DRIVELINE RATIOS TRANSMISSION AND		3 - 2.74 SPEEO 1.57 1.00	2.07(R)					3- SPEE 2.74 2 1.57 (a) 1.00 2 (b) 2.07(R)	3- SPEEO 2.52 (a) 1.00 (b) 1.93(R)		
		CAR MADELS		OVA HEVROLET IONZA	2	OMEGA				1	1		
	1977	TIOS	200	2.56 b) N	2.29	2.56							
		DRIVELINE RATIOS TRANSMISSION AND	MIL	3 - 2.74 SPEE0 1.57 1.00	2.07(R)					 			
		CAR	ķ							! !			
MODEL YEAR	9261	TIOS											
MO		DRIVELINE RATIOS TRANSMISSION AND								 	 . 		
		CAR				_				1	1		
	1975	TI0S AXLE											
PAGE 21		ORIVELINE RATIOS TRANSMISSION AXI									 		
GENERAL MOTORS	ENCINE	TYPE AND SIZE (TRANS. TYPE)	LG3 CONT (AUTO)					[3055p-4v (5.02) LG4 (CHEVY)	(AUTO)	(айто)		*NEW IN 1978

FIGURE A-1. GENERAL MOTORS ENGINE-TRANSMISSION-REAR AXLE PRODUCT SCHEDULE, 1975-80 (CONTINUED)

	_							
AC-CTP		CAR						
78 AC	1980	AXLE						
REVISEO: 8/1/78	1	DRIVELINE RATIOS TRANSMISSION AXLE						٠.
		CAR			 			
	1979	AXLE AXLE			 		~~~~	
	1	DRIVELINE RATIOS TRANSMISSION AXL			· - - - -			
		CAR MODELS			LESABRE(g) (a,b) LESABRE(f) (a,b)	ELECTRA		
	1978	ANLE			2.73 3.08 2.41 2.73 3.08	2.41 2.73 3.08		
		DRIVELINE RATIOS TRANSMISSION AXL	(DISCONTINUEO)		3- SPEEO 2.52 1.52 1.00 1.93(R)	3- SPEED 2.48 1.48 (a) 1.00 (b) 2.08(R)		
		CAR MODELS	CENTURY (f)		CENTURY (f) ELECTRA RIVIERA LESABRE (f) CENTURY (g)	<u> </u>		
	1977	TIOS	2.41		2.41			
		DRIVELINE KATIOS TRANSMISSION AXE	3- 2.52 SPEED 1.52 (a) 1.00 (b) 1.93(R)	C) C MIE	3- 2.52 SPEED 1.52 (a) 1.00 (b) 1.93(R)		S. L.	(DISCONTINGED)
×		CAR MODELS	SKYLARK CENTURY (f) VENTURA OMEGA		(E) (S)	VENTURA OMEGA		CHEVELLS NONTE CARLO CHEVROLET
MODEL YEAR	1976	TIUS	2.56		2.56 2.73 2.73 3.08 3.23			2.73 2.56 3.08 2.73
ON		DRIVELINE RATIOS TRANSMISSION AXI	THM 350 3- 2.52 SPEE0 1.52 1.00 1.93(R)		3- 2.52 SPEED 1.52 1.00 1.93(R)	(DISCONTINUED)		
		CAR MODELS	GENTURY (1) APOLLO SKYLARK OMEGA VENTURA		CENTURY (f) APOLLO SEYLLARK SMYLARK SMYCLAR OMEGA VENTURA CENTURA LESABRE (f)	1370)	CAMARU MONTE CARLO NON CHEVELLE(f)	2.73 CHEVELLE(f) 2.75 CAYARO 2.76 VONTE CARLO 3.08 (THEVY (f) 2.77 GHEVELLI.(g)
	1975	TIOS	2,56		2,56 3.0R	(CHEVROLET	2.73	2.73 2.76 3.08 2.73
PAGE 22		DRIVELINE RATIOS TRANSMISSION ANDE	3- 2.52 SPEED 1.52 1.00 1.93(R)		3- 2.52 SPEED 1.52 1.00 1.93(R)		3- 2.85 2 SPEED 1.68 1.00 2.95(R) 2	3- 2.52 SPEED 1.52 1.00 1.93(R)
GENERAL MOTORS	ENCTINE	TYPE AND SIZE (TRANS, TYPE)	V-8 V-8 SOCID-2V (5.7 t.) L12 (80CC) (MT0)	1-8 350C1D-4V (5.7 ¢) L77 (BUICK)		(AT10) (+-8 350C10-2v (5.7 t.) L65 (GREVY)	(0.1.10)	

FIGURE A-1. GENERAL MOTORS ENGINE-TRANSMISSION-REAR AXLE PRODUCT SCHEDULE, 1975-80 (CONTINUED)

		CAR MODELS		
	30			· · · · · · · · · · · · · · · · · · ·
AC-CTP	1980	DRIVELINE RATIOS TRANSMISSION AXLE		
8/1/78 AC-CTP		DRIVEL		•
REVISED:		CAR	. !	
	1979	TIDS		
		DRIVELINE RATIDS TRANSMISSION AXI		
	•	CAR	CAMARO FIREBIAD	2.41 CHEVY (f) 2.41 CHEVY (g) 3.08 FIRESIND 1.08 FIRESIND 1.08 FIRESIND 1.09 HERY (g) 2.41 NOIA 2.41 NOIA 2.41 NOIA 3.08 2.41 CHEVY (f) 3.08 2.41 CHEVY (f)
	8761.	ANLE	3.08	
		DRIVELINE RATIOS TRANSMISSION AND	4- 2.85 (a) 1.35 (b) 1.00 (b) 2.85 (c) 3.85 (c)	3- 2.52 SPEED 1.02 1.03 1.93(R) 3- 2.74 SPEED 1.77 (S) 2.07(R)
*.		CAR	CAMARO NOVA	COMPRELEGY NONT CARD NONT CARD NONT CARD NONT CARD NONT CARD NONT CARD NETTA 88(7) DELTA 88(6) DELTA 88(6)
	1477	ATIOS	3.08	2.56 (b) 2.78 (c) 2.78 (d) 2.79 (d) 3.08 (e) 3.08 (e) 3.08 (e) 3.08 (e) 3.08 (e) 4.08 (e) 5.73 (e) 6.08 (e) 6.0
		DRIVELINE RATIOS TRANSMISSION AND	CHENROLET 4. 2.85 SPEED 2.02 (4) 1.35 (1) 2.85(R)	3- 2.52 SPEED 1.50 1.93(R) 1.93(R) THM 200 3- 2.74 SPEED 1.57 (b) 1.00 (b) 1.00
\R		CAR	Y ON	(a) COMMON (b) COMMON (c) COMMON
WODEL YEAR	9261	ATTOS		2.73 (73 (8) 3.08 (2.5) 2.56 (3.08 (3.08 (3.08 (3.08) 2.73 (3.08)
Æ.		DRIVELINE RATIOS TRANSMISSION AND	<u> </u>	3- 2.52 SPEED 1.32 1.00 1.93(R)
		CAR NODELS	NO CA	1.08 CAMARD 2.56 NOVA (c.) 7.74(c) OHEWELLE (g.) 3.08 CHEWY (f.) 2.773 CHEWY (f.) 2.773 CHEWY (f.)
	1975	N AXLE	CHEVROLLT 2.73 NO 3.06 NO 8)	3.08 2.56 2.56 3.08 3.08 2.57 3.08
PAGE 23		DRIVELINE RATIOS THANSMISSION AND	SPEED 1.88 (c) 1.00 (c) 2.95(R) 1.00 2.25(R) 2.25(R)	NPEED 1.52 1.93(R)
GENERAL MOTORS	FNCINE	TYPE AND SIZE (TRANS, TYPE)		(OTAA)

FIGURE A-1. GENERAL MOTORS ENGINE-TRANSMISSION-REAR AXLE PRODUCT SCHEDULE, 1975-80 (CONTINUED)

	CAR								
0861	DRIVELINE RATIOS TRANSMISSION AXLE								
	CAR						 		
1979	ATIOS AXLE								!
	DRIVELINE RATIOS TRANSMISSION AXLE			 			 		
	CAR MODELS		CAMARO	CAMARO				3.36 CORVETTE	CORVETTE
1978	TIOS		3.73	3.42					3.55
	DRIVELINE RATIOS TRANSMISSION AXL		4- 2.64 SPEE 1.75 (a) 1.34 (b) 1.00 (b) 2.55(R)	3- 2.52 SPEED 1.52 1.00 1.93(R)		(DISCONTINUED)	CHEVROLET	4- 2.85 SPEED 2.02 (a) 1.35 (b) 1.00 2.85(R)	3- 2.52 SPEED 1.52 1.00 1.93(R)
	CAR		CAPARO	CAMARO			CORVETTE		3.08 CORVETTE
1977	TIOS		3.73	3.42			3.08		
	ORIVELINE RATIOS TRANSMISSION AXLE		4- 2.64 SPEED 1.75 (a) 1.34 (b) 1.00 2.55(R)	3- 2.52 SPEE0 1.52 1.00 1.93(R)		4- 2,64	(a) 1.34 (b) 1.00 2.55(R)		3- 2.52 SPEED 1.52 1.00 1.93(R)
	CAR MODELS						CORVETTE		CORVETTE
1976	TOS				(DISCONTINUED)		80.6		1.08
	DRIVELINE RATIOS TRANSMISSION AXI		 - 	 	00810)	CHEVROLET	(a) 1.34 (b) 1.00 (b) 1.00 2.55(R)		3- 2.52 SPEED 1.52 1.93(R)
	CAR MODELS			 	THM 400 08 CORVETTE 73		3.08 CORVETTE		
1975	AT10S AXLE				% % لبا	26			
	DRIVELINE RATIOS TRANSMISSION AXLE			 	3- 2.48 SPEED 1.48 2.08(R)	4- 2.64	2.55(R)		
	ENCINE TYPE AND SIZE (TRANS, TYPE)	V-8 * 350CID-4V (5.7 ℓ) LM1/Z28 (CHEVY)	(MANUAL)	(AUTO)	7 8	(MANUAL)	(NANUAL)		(actor)

FIGURE A-1. GENERAL MOTORS ENGINE-TRANSMISSION-REAR AXLE PRODUCT SCHEDULE, 1975-80 (CONTINUED)

	F								
C-CTP		CAR							
/78 AC	1980	TIOS							
REVISEO: 8/1/78 AC-CTP		ORIVELINE RATIOS RANSMISSION AXI							
REVISE		ORIVELINE RATIOS TRANSMISSION AXLE							
		CAR					 		-
	1979	TIOS		1					
		DRIVELINE RATIOS RANSMISSION AXL					 		
		DRIVELINE RATIOS TRANSMISSION AXLE		<u> </u>	1		† † †		
		CAR		CORVETTE	CORVETTE		CORVETTE		
	80			3.70 Co	3.70 co				
	1978			3. 3.	3.	E0)	3.55 3.55		
		DRIVELINE RATIOS TRANSMISSION AXI		4- 2.64 SPEED 1.75 (a) 1.34 (b) 1.00 2.55(R)	4- 2.43 SPEE 0 1.61 (3) 1.23 (b) 1.00 2.35(R)	(OISCONTINUEO)	3- 2.52 SPEED 1.52 (a) -1.00 (b) 1.93(R)		
		TKA		4- SPEE (a (b	4- SPEE (a (b	1 (01	3- SPEE (a) (b)		
		CAR		CORVETTE	CORVETTE	3.55 CORVETTE	i ! !		
Ì	1977	10S AXLE	Г	3.55	3.70	3.55	1		
		ORIVELINE RATIOS		2.64 2.64 1.75 1.34 1.00 2.55(R)	2.43 2.43 1.61 1.23 1.00 2.35	48 48 00 08(R)			INCED
		ORIVELINE RATERANSHISSION	Ĺ	4- 2.64 SPEE 0.1.75 (a) 1.34 (b) 1.00 2.55(R)	4- 2.43 SPEED 1.61 (a) 1.23 (b) 1.00	3- 2.48 SPEED 1.48 (a) 1.00 2.08(R)			COLSCONTINUED
Ī		CAR		CORVETTE	CORVETIE		1	,	FIREBIRD LEMANS (f)
AR					l .	CORVETTE			
MODEL YEAR	1976	AT10S AXLE		3.55	3.55	3.36	 		2.41
M		ORIVELINE RATIOS TRANSMISSION AXI		2.64 1.75 1.34 1.00 2.55(8	2.43 1.61 1.23 1.00 2.35(R	2.48 1.48 1.00 2.08		USC MILL	2.52 1.52 1.00 1.93(R)
		ORIV		4- 2.64 SPEC 1.75 (a) 1.34 (b) 1.00	4- 2.43 SPEE 1.61 (a) 1.23 1.00 2.35(R) 3	ㅜ ' 黨종	 	ā	3 -E S
		CAR		VETTE	CORVETTE	CORVETTE	 		£
				3.55 CORVETTE		6 COR1			2.56 LEMANS
	1975	RATIOS IN AXL		3.5	3.55 3.70 (d)	3.36 3.55 3) (d)	i		
PAGE 25		ORIVELINE RATIOS TRANSMISSION AXLE		4- 2.64 SPEED 1.75 1.34 1.00 2.55(R)	4- 2.43 SPEE0 1.61 1.23 1.00 2.35(R)	3- 2.48 SPEEO 1.48 1.00 2.08(R)	 		3- 2.52 SPEE0 1.52 (a) 1.00 1.93(R)
PAGE		TRAN		SPEE	4- SPEE	3- SPEE			
MOTORS		SIZE TYPE)	4v 3vx)		(MANUAL)	(AUTO)	(4010)	N C O	* OROPPEO IN 1977
GENERAL MOTORS		TYPE AND SIZE (TRANS, TYPE)	V-8 350C10-4V (5.7 l) L82 (CHEVY)	5	2			V-8 * 350CID-2V (5.7 g) (PONTIAC)	OPPEO
GE		t S	2 0					> 600	*

FIGURE A-1. GENERAL MOTORS ENGINE-TRANSMISSION-REAR AXLE PRODUCT SCHEDULE, 1975-80 (CONTINUED)

	CAR						
1980	ORIVELINE RATIOS THANSMISSION AXLE			·			
	CAR						}
6261	DRIVELINE RATIOS						
	CAR						SEVILLE
1978	VTIOS						(b) 2.56 (cd) 3.08
	DRIVELINE RATIOS			(DISCONTINUEO)	(DISCONTINUED)		3- 2.48 (b) SPEED 1.48 2.56 1.00 (cd) 2.07(R) 3.08
	CAR			FIREBIRD LEMANS (() PONTIAC (F)	GRAND PRIX		SEVI1.LE
1977	ATTOS AXIF			2.41	2.41		48 (b) 48 2.56 48 00 07(R) 3.08
	TRANSMISSION AND	(OISCONTINUED)		3- 2.52 SPEEO 1.52 (a) 1.00 (b) 1.93(R)	3- 2.48 SPEE 1.48 (a) 1.00 (b) 2.08(R)		3- 2.48 SPEE0 1.48 1.00 2.07(R)
	CAR	GRANO PRIN		FIREBIRD LEMANS (f)	GRANO PRIX		SEVILLE
1976	ATIOS	2.41		THM 350 2 2.41 3(R) 2.56	2.56		3.08
	DRIVELINE RATIOS	3- 2.48 SPEED 1.48 1.00 2.08(R)	(DISCONTINUED)	3- 2.52 SPEE0 1.52 1.00	3- 2.48 SPEED 1.48 (c) 1.00 (c) 2.08(R)		3- 2.48 SPEED 1.48 1.00 2.07(R)
	CAR		FIREBIRD	FIREBIRO LEMANS (f)			SEVILLE
1975	AVI E		VROLE	.56			286
200 TO	ORIVELINE RATIOS		4- 2.54 SPEED 1.80 (a) 1.44	1.54(R) 3- 2.52 SPEED 1.52 1.00 1.93(R) 2.13			3- 2.48 SPEED 1.48 2 1.00 2.07(R)
L	TYPE AND SIZE (TRANS, TYPE)	SOCID-2V (CONT) (PONTIAC) (AUTO)	V-8 ** 350C10-4V (5.7 P) L/6 (PORTIAC) (MANUAL)	(AVTO)	(AUTO)	V-8 ** 350CIO-FI (5.7 ℓ) L49 (CADILLAC)	(AUTO)

** DROPPED IN 1978 * NEW IN 1975

FIGURE A-1. GENERAL MOTORS ENGINE-TRANSMISSION-REAR AXLE PRODUCT SCHEDULE, 1975-80 (CONTINUED)

FIGURE A-1. GENERAL MOTORS ENGINE-TRANSMISSION-REAR AXLE PRODUCT SCHEDULE, 1975-80 (CONTINUED)

	CAR			_							
1980	100	AACE									
	ORIVELINE RATIOS	TRANSMISSION									
	CAR	Page 1									
6/61	2013	AXLE									
	DRIVELINE RATIOS										
	CAR	engano.									
1978	501	AMLE						 			
_	1 - F	TRANSPILSSION									
	CAR	c tantes					····				
1477	TOS							 			
-	DRIVELINE RATIOS				(DISCONTINUED)	· · · · · ·	, , ,	 (DISCONTI 4JED)		(DISCONTINUED)	
	CAR	CHIMINA			CHEVELLE(f)	(b) 2.73 CHEVELLE(g) 2.73 CHEVY(g)	(b) (c) (b) 2.56	GRAND PRIX LEMANS PONTIAC(f)		4	FIREBIRD
		± .			2.73 (d) 3.08	(b) 3.08 (b) 2.73	(b) 2.73 (b) 2.56	2.41			3.08
1976	A) 10S							2	1	× .	€
1976		(OISCONTINUED)			3- 2.52 SPERO 1.52			3- 2.48 SPEED 1.48 (a) 1.00 2.08(R)		BORG & BECK	(a) 1.23 1.00 2.35(R)
1976	CAR DRIVELINI RAT	AUDELOS TRANSMISSION (OISCONTINUED)	CHEVY (f)	CHEVY (g)	MONTE CARLO CHEVELLE (C) 3- CHEVELLE (C) 3- CHEVELLE (B) 1,000					B0RG	SPEED (a)
197.1	OS CAR DRIVELINI RAT	AXIE SUDELS TRANSHISSION (01SCONTINUED)	.73	08 CHEVY(g)	2.73 MONTE CARLU 2.56 CHEVELLE(I) 3.08 CHEVELLE(g)			PONTIAC(f) 2.56 LEMANS(g)		BORG	3.08 FIREBIND SPEED (a)
	OS CAR DRIVELINI RAT	AUDELOS TRANSMISSION (OISCONTINUED)	3- 2.48 2.73 CHEVY(f)	08 CHEVY(g)	3- 2.52 2.73 MONTE CARLO SPEED 1.52 2.56 CHEWELLE(I) 3- 2.52 SPEED 1.00 3.08 CHEWELLE(S) 3- 2.53 SPEED 1.30(R) 2.73 SPEED 1.90(R) 2.73					BORG	SPEED (a)

FIGURE A-1. GENERAL MOTORS ENGINE-TRANSMISSION-REAR AXLE PRODUCT SCHEDULE, 1975-80 (CONTINUED)

CIP		CAR			
8/1/78 AC-CIP	1980	TIOS			
REVISED: 8/1/		TRANSMISSION AXLE			
		CAR MODELS			
0.01	6/61	ATTOS			
		DRIVELINE RATIOS TRANSMISSION AND			
		CAR	FIREBIAD PONTIAC(g) PONTIAC(f)		FIREBIRD
92.0	19/8	ATIOS AXLE	2,56		3.42
		TRANSMISSION AXI	3- 2-52 SPED 1.52 (A) 1.03 (b) 1.93(R) (b) 2.93(R)		4- 2.43 SPEED 1.61 (a) 1.23 (b) 1.20 2.35(R) 3- 2.52 SPEED 1.52 (b) 1.00 (c) 1.00
		CAR	2.41 PURENKD 2.41 POWITAC(F) 2.41 LEMANS(F) 3.23 2.56 LEMANS(R) 4(1) 3.33 2.56 POWITAC(R) 2.56 POWITAC(R)	CRAND PRIX	FIREBIRD
1012	1/61	ATTOS AXLE	2.41 (h) (4) 3.23 2.56 (1) 3.23 2.56	2.41 (1) 3.23	HORG 6 BECK 43 3.23 661 23 00 35(R) THM 350 THM 350 1.52 5.22 3.23
		DRIVELINE RATIOS TRANSMISSION AXL	TRN 350 3- 2.52 SPEED 1.32 (A) 1.00 (b) 1.93 (R)	3- 2.48 SPED 1.48 (a) 1.00 (b) 2.08(R)	SPEED 1.53 (R) 1.23 (R) 2.35 (
VK		CAR	2.41 FIREBIRD	CRAND PRIX LEPANS(f) LEPANS(g) PONTLAC(f) (DELTA 88) (OLDS 98)	
MODEL YEAR	1970	ATIOS AXLE		2.41	
× -		DRIVELINE RATIOS TRANSMISSION AXI	1.552	3-2,48 SPEED 1,48 2,08(R)	
		CAR MODELS	FIREBIND	(a) 2.73 PONTIAC(g) 2.56 GRADN PRIX LEMANS (1) 2.73 DELIA 88 (g) 01DS 98 01DS 98 01DS (g) LEMANS (g)	
51.01	1973	ATIOS	2.56	(a) 2.73 2.56 2.73	
PAGE 29		DRIVELINE RATIOS TRANSMISSION AXLE	3- 2.52 SPEED 1.52 1.00 1.93(R)	3-2.48 SPEED 1.48 2.08(R)	
GENERAL MOTORS		ENGINE TYPE AND SIZE (TRANS, TYPE)	(0)	V-8* 400011-4V (6.56) W/72 (FORTIAC)	(AANTO)

FIGURE A-1. GENERAL MOTORS ENGINE-TRANSMISSION-REAR AXLE PRODUCT SCHEDULE, 1975-80 (CONTINUED)

CAR CAR 1979
ORIVELINE RATIOS
TRANSMISSION AXLE LE SABRE(g) DELTA 88(f) OELIA 88(g) PONTIAC(f) PONTIAC(g) CAR FIREBIRD 1978
DRIVELINE RATIOS
TRANSMISSION AXLE (c,d) 2,56 (d) 3,08 (c) (c) (b) 3,23 (b) 3,23 (d) (d) 2,73 2,73 (e) (c) (c) (c) (d) 2.73 (c) 2.73 2.56 3.08 3.24 (b) 3.23 (b) 2.56 (d) (d) 3.08 (a) 2.56 (b) 3.23 (b) (c) (d) 3- 2.52 SPEEO 1.52 1.00 1.93(R) ELECTRA RIVIERA LE SABRE(f) LE SABRE(g) CENTURY (g) CAR MODELS GRAND PRIX LEMANS(g) LEMANS(f) FIREBIRD 3- 2.52 (d) SPEED 1.52 2.73 C 1.00 (d) 1.93(R) 3.08 (b) 2.56 (a,b) 3.08 (d) (d) 2.73 (b) 3,08 (d) (d) (c,d) 2,56 (c) 2.41 (d) 2.56 (d,h) 3.08 (c,d, (c) 2.41 (d) 2.56 THM 350 DRIVELINE RATIOS
TRANSMISSION AXLE CUTLASS (f) 0ELTA8B (f) 0L0S 98 CUTLASS (g) DELTA88 (g) (f) (g) (1,c,d) 3.08 (1,c,d) 3.23 (i,c,d) 3.08 (i,c,d) 3.23 (c) 2.56 (d) 2.73 (c) 2,41 (d) 2,56 2,56 2,41 2,73 CAR MODELS MODEL YEAR DRIVELINE RATIOS
TRANSMISSION ANLE CAR MODELS DRIVELINE RATIOS
TRANSMISSION AXLE (VLIV) AERAL YOTORS ENGINE TYPE AND SIZE (TRANS, INPE) 4 NFT L' 1477 v=8* 403CTD=4V (6.6.?) 180 (0UBS)

FIGURE A-1. GENERAL MOTORS ENGINE-TRANSMISSION-REAR AXLE PRODUCT SCHEDULE, 1975-80 (CONTINUED)

AC-CIP		CAR							
REVISED: 8/1/78	1980	DRIVELINE RATIOS TRANSMISSION AXEL							
		CAR		 			1 1 1		
	1979	TOS		1			I .		
		DRIVELINE RATIOS TRANSMISSION AXLE	(DISCONTINUED)	 	OFFICONTRUED		 		
		CAR	TORONADO	ELECTRA OLDS 98 RIVIERA		ELDORADO	CADILLAC		
	1978	RATIOS N AXLE	2.73 3.07	8 (b) 3.23 (d) (d)	96:3	(b) (c) (d) (3) 3.07	(a,b) 2,28 (c) (c) (d) 3.08		ê.
		DRIVELINE RATIOS TRANSMISSION AXL	3- 2.48 SPEED 1.48 1.00 2.08(R)	3- 2.48 SPEED 1.48 1.00 2.08(R)		3- 2.48 (b) SPEED 1.48 2.73 1.00 (d) 2.07(R) 3.07	3- 2.48 SPEED 1.48 1.00 2.07(R) 2		(DISCONTINUED)
		CAR	2.73 TORONADO	 		ELDORADO	CADILLAC		ELDORADO
	1977	RATIOS N ANLE	103	 		(b) 3.07	1HM 400 48 (a,b) 48 2.28 30 37(R) 3.08		THM 425 48 (a,b) 48 2.73 00 (c,d) 3.07
		DRIVELINE RATIOS TRANSMISSION AND	3- 2.48 SPEED 1.48 1.00 2.08(R)	 		3- 2.48 SPEED 1.48 1.00 2.07(R)	3- 2.48 SPEED 1.48 1.00 2.07(R)		3- 2.48 SPEED 1.48 1.00 2.07(R)
AR		CAR	! !	 	 		 		1
MODEL YEAR	1976	N AXLE	1	<u> </u> 	1		 		1
		DRIVELINE RATIOS TRANSMISSION ANLE	1	 	 				
		CAR		 	} 				1
	1975	RATIOS 3N AXLE			1				1
PAGE 31		DRIVELINE RA TRANSMISSION	, .	 		! ! !			
GENERAL MOTORS		ENGINE TYPE AND SIZE (TRANS, TYPE)	(AUTO)	(OIDV)	V-8* 425CD-4V (7.0£) L33 (CADILLAC) (AUTO)		(AUDA)	V-8* 425CD-E.F.1. (7.0 f) L35 (CADILLAC)	(AUTO) (AUTO) (AUTO)

FIGURE A-1. GENERAL MOTORS ENGINE-TRANSMISSION-REAR AXLE PRODUCT SCHEDULE, 1975-80 (CONTINUED)

ſ	1	,		*******								_			
REVISED: 8/1/78 AC-CTP		CAR													
	1980	RATTOS N ANTI	1												
		TRANSMISSION AND													
REV	-					-						_			
		CAR													
	6/61	RATIOS N AXIE					-								
		DRIVELINE RATIOS TRANSMISSION AXIR													
F	1										-		<u> </u>		
		CAR	I												
	1978	RATIOS ON AXIE	(9.5	(R) 3.08											
		DRIVELINE RATIOS	3- 2.48	SPEED 1.48 1.00 2.07 (R)											
F		CAR		CADILLAC				,							
	1977			(a,b) 2.28 (c) CAD 2.73 (d) 3.08	, , , , , , , , , , , , , , , , , , , 					.					
	13	DRIVELINE RATIOS TRANSMISSION AXIE	THM 400	2.48 ((1.48 2 1.00 2.07(R) 2		INUED)				INUEO)					
		DRIVE		3- 2 SPEE0 1		(DISCONTINUED)				(OISCONTINUEO)					-
		CAR					W			1	LE SABRE(g)		ELECTRA	RIVIERA	LE SABRE(f)
MODEL YEAR	1976	IOS AXIE				+	2.73 CHEVY			+	2.93 LE 3.23	(2)	2.73 (a) 2.56 ELE (a) 3.23	(a) 2.56 RIV (c) 2.93	2.73 LE
rion		TRANSMISSION AXE				THM 400		(OISCONTINUED)		007	2.48				1.11
		DRIVE				图	3- SPEED 1 (a) 1 (b) 2	(OISCO)		ТНИ 400	3- SPEED				
		CAR					3.08 CHEVY 3- 2.48 (4) MONTE CARLO SPEED 1.48 (a) 1.00 (b) 2.08(R)	Ì	2,73 LE SABRE(f)		2.93 LE SABRE(g)	ELECTRA	VIERA		
	1975	VIOS AXIF					2.73 CF (d) MC 3.08	THM 350	2.73 LE		2.93 LE	2.73 EL	2.93 RIVIERA (c) 2.73		
		ORIVELINE RATIOS					3- 2.48 SPEED 1.48 (a) 1.00 2.08(R)		3- 2.52 SPEED 1.52 1.00 1.93(R)		3- 2.48 SPEED 1.48	2.08(R)		,	
PAGE 32		ORIV	 				3- SPEED (a)	Ĭ	3- SPEED		3- SPEED				
MOTORS		D S IZE	(AUTO)		tv (tv	(AUTO)		(AUTO)	,	(AUTO)					*DROPPEO IN 1977
GENERAL MOTORS		ENGINE TYPE AND SIZE	[L35 (CONT.)		V-8* 454CIO-4V (7.4 £) LS4 (CHEVY)			V-8*	433CID-4V (7.4£) BUICK						*DROPPE.

FIGURE A-1. GENERAL MOTORS ENGINE-TRANSMISSION-REAR AXLE PRODUCT SCHEDULE, 1975-80 (CONTINUED)

	_		_		_									_
REVISED: 8/1/78 AC-CTP		CAR	INDEED											
	1980	TIOS	AXLE											
		DRIVELINE RATIOS	TRANSMISSION											
929		CAR	NODELS											
	1979	105	AXLE							***************************************				
		DRIVELINE RATIOS	IKANSMISSION											
		CAR												
1	1978	TIOS	AXLE											
		DRIVELINE RATIOS	TRANSMISSION											
		CAR	NODEL:3											
	1977	SOL	VYPE											
		DRIVELINE RATIOS	TRANSMISSION		(DISCONTINUED)		(DISCONTINUED)					(DISCONTINUED)	(DISCONTINUED)	
~		CAR	SUDEES			FIREBIRD		GRAND PRIX LEMANS(f)	LEMANS(g) PONTIAC(f)	PONTIAC(g)		TORONADO	CUTLASS (DELTA 88) (OLDS 98)	
MODEL YEAR	1976	F10S	ANLE			3.23		2.41	(a) 2,41 (c)	(e) 2 (c) 2 (c) 2 (c) 2		2.73	2.56 2.73 3.08	
NOI		DRIVELINE RATIOS	TRANSMISSION		BORG & BECK	4- 2.43 SPEED 1.61 (a) 1.23 1.00 2.35(R)	THM 400	3- 2.48 SPEED 1.48	1.00 2.08(R)			3- 2.48 SPEED 1.48 L.00 2.08 (R)	THM 400 3- 2.48 SPEED 1.48 1.00 2.08(R)	
		CAR			1 1			GRAND PRIX LEMANS(f)	PONTIAC(f)	2.73 PONTIAC(g) (c) 2.93		2,73 TORONADO	DELTA 88 (f) OLDS 98 CUTLASS DELTA 88 (g)	
	1975	TIUS	AMLE		<u> </u>			2.56	2.56 (c) 2.73	2.73 (c) 2.93		2.73		_
PAGE 33		DRIVELINE RATIOS	TRANSMISSION					3- 2.48 2 SPEED 1.48	2.08(R)			3- 2.48 SPEED 1.48 1.00 2.08(R)	3- 2.48 2 SPEED 1.48 1.00 2.08(R)	
GENERAL MOTORS		ENGINE TYPE AND STRE	(TRANS, TYPF)	V=55 455CID-4V (7,42) POVTIAC	(WASCAL)		(УСТО)				V-83 455CHP-4V (7.4.1)	(470)	(:tT0)	*DROPPED IN 1977

	CAR		
1980	DRIVELINE RATIOS TRANSMISSION AXLE		
	CAR		
1979	DRIVELINE RATIOS TRANSMISSION AXIE		
	CAR		
826.	I LOS		
	DRIVELINE RALIOS	NO FEET GRANT	
	CAR		
1977	TIOS AVIE	271	
	DRIVELINE RATIOS	(DISCONTINUED)	(DISCONTINUED)
	CAR	ELDORADO	ELDORADO
1976	VATIOS S AXI.F	3.08	2.73
	DRIVELINE RATIOS	-H	TRN 425 3- 2.48 SPEED 1.08 2.09(R) 1 TRM 400 1 20 5 20 5 20 6 20 6 20 6 20 6 20 6 20 6 20 6 20 6
	CAR	2.73 ELDORADO 3.15 CADY LINO & AMBULANCE 2.73 CADILLAC	
1975	ATIOS	£7.	
	DRIVELINE RATIOS TRANSMISSION AXLE	3- 2.48 SPEED 1.46 2.09(R) 3- 2.48 3- 2.48 3- 2.48 3- 2.48 1.00 2.09(R) 2	
	ENGINE TYPE AND SIZE	(18ANS, TYPE) V-6-8 (8.23) (8.23) (AUTO) (AUTO)	(AUTO) (AUTO) (AUTO) (AUTO) (AUTO)

FIGURE A-1. GENERAL MOTORS ENGINE-TRANSMISSION-REAR AXLE PRODUCT SCHEDULE, 1975-80 (CONCLUDED)



APPENDIX B FORD ENGINE-TRANSMISSION-REAR AXLE PRODUCT SCHEDULE

TABLE B-1. NOTES FOR FORD ENGINE-TRANSMISSION-REAR AXLE PRODUCT SCHEDULE

- (a) Not available in California
- (b) Not available, high altitude
- (c) California only
- (d) High altitude only
- (e) Standard in California
- (f) Variable venturi, California & high altitude only
- (g) Optional in California
- (h) Standard with station wagon
- (i) Federal only
- (W) Windsor engine
- (M) Modified Cleveland, destroked 400 CID engine
- (R) Reverse
- (1) The optional ratio may be used in lieu of the standard ratio where A/C in included.
- (2) FMX vs C-4 not clear that these transmissions are available for both 302 & 351 engines.

 (Interchangeable)
- (*) Economy speed combination

FORD ENGINE-TRANSMISSION-REAR AXLE PRODUCT SCHEDULE, 1975-80 FIGURE B-1.

	A STATE OF THE STA
CCJ) HADELS HADELS HADELS ESHUR ESHUR	
ECTED 2.47	
CCR PINTD 6 BDB-CAT CAT CAT (ACONS (SEDN) (4) HUSTANC 11 11 11 11 11 11 11 11 11 11 11 11 11	
3.1B	
1977 1977	
v.	<u> </u>
CAR WODELS BERNYS BERNYS FINNS FINNS II BUSTANG. III BOGGAI	•
31.8 3.40 3.40 3.40 3.40 3.40 3.40 3.40 3.40	
1976 1976	
CAR MODELS PUNTD BUBCAT II CAPRI II CAPRI II PUNTD BUBCAT VACCY II II PUNTD BUBCAT II II II II II II II II II II II II II	
3.40 3.40 3.40 3.40 3.40 3.40 3.40 3.40	
PAME 2 1975 DRIVELINE ACTION TRANSHISSION AND 1.37 1.37 1.36 (R) 3.66 (R) 3.66 (R) 3.66 (R) 3.37 (R) 3.37 (R) 3.37 (R) 1.20 (R) 3.37 (R) 1.47 (R) 2.47 (R) 2.47 (R) 2.41	
G G	1
ENCINE ENCINE TIVE AND SIZE (CONT) TAGE TAGE TAGE TAGE TAGE TAGE TAGE TAGE	

CTP		CAR	2002										
/78 AC-	1980		AXLE										
REVISED: 8/1/78 AC-CTP		DRIVELINE RATIOS	TRANSMISSION										
		CAR	NUMERS										
	1979	TIOS	AXLE										
		DRIVELINE RATIOS	TRANSMISSION AXLE										
		CAR	MODELS	BOBCAT PINTO MUSTANC II			MUSTANG II						BOSCAT PINTO MUSTANG II
	1978	VTIOS	AXLE	3.18 (d)			3.DD (1)						3.40
		DRIVELINE RATIOS	TRANSMISSION	3- SPEED 2.46 1.46 1.00	(K) 2,1.9	7-7	SPEED 4.07 2.57 1.66 1.00	CATEGORITHMEN)	(Table 1 and		(DISCONTINUED)		3- SPEED 2.45 1.46 1.00 (R) 2.19
		CAR	MODELS	1 -		1			MUSTANG		,	MUSTANG II (a) (b) PINTO (a)(b) BOBCAT(a)(b)	MUSTANC TI (d) PINTO (b)(s) BOBCAT(b)(c)
	1977	VIIOS	AXLE	1		Ì			3.00			3.00	3*D0
		DRIVELINE RATIOS	TRANSMISSION AXLE	 		1		GES	4- SPEED 3.50 2.21 1.43	1.00	(R) 3.38	3- SPEED 1.47 1.00 (R)2.11	\$PEED 2.46 1.46 1.00 (R)2.19 (a) (b)
×		CAR	MODELS	PINTO			MUSTANG II		MUSTANG II			PINTO	MUSTANC FUND BORGAT MISTANC II PINTO BOBGAT
MODEL YEAR	1976			3.18 3.40 (OPT)	TUTCH		2.79		3.00 0PT: 3.40	LOCK;	3.4D	3.00 3.40 (OPT) 3.18 (c)	3.4D 3.4D 3.4D 3.4D 3.18 (e) 3.18
MO		DRIVELINE RATIOS	TRANSMISSION	SPEED , 0.46 1.00	(K)Z.Z0 SINCLE DISC CLUTCH	WIDE RATIO	SPEED 4.07 (a)2.57 1.66 1.06 (R)3.95		4- SPEED 3.50 2.21 1.43	1.D0	(R) 3, 38	5- SPEED 2.47 1.47 1.00 (R)2.11	5-65-46 1.46 1.46 (R)2.2D
		CAR	MODELS	MUSTANG II PINTO		1			MUSTANG				PINTO
	1975	ATIOS	AXLE	3.55		-			3,55				3.40
PAGE 3		DRIVELINE RATIOS	TRANSMISSION AXLE	3- SPEED 2.46 1.46 1.00	(R)2.20				4- SPEED 3.50 2.21 1.43	1.00	(R) 3.38		PEED 46 1.46 1.40 (R)2.20
FORD	NATONA	TYPE AND SIZE	(cont) 11-4 14pcip-2v	(AUTOMATIC)	V~6 (60°) 170.8CID-2V	(MANUAL)		Commence	(CANUAL)		(OTTANOPIA)	COTTO	(АУТОНАТІС)

B-4

		CAR	STHEET.S																								=
	1980	Hos	ANTE																							_	
8/1/78 M-CTP		DRIVELING RATIOS	TRANSHISSION ANDE																								
REVISED:		CAR	MoDELS																								
	1979	T105	AXLE.																								
		DRIVELINE RATIOS	TRANSMISSION AXLE																					~			
		CAR	MODEL'S		BOBCAT	MUSTANG 11												EATRMONT ZLPHYR								ZEPIINK	
	1978	1108	ANLE		3.40	3											(1)	3.08							2.73	1.08 1.08	
		ORIVELINE RATIOS	TRANSMISSION		3- SPEED 2.47	1.00 (R) 2.11		(DISCONTINUED)										SPERD 3.56 1.90	(K) 3.78	(DISCONTINEED)					SPIRED	1.00	
		CAR	MODELS.			PINTO (c) BOBCAT (c)			PINTO (c) BOBCAT (c)									MAVERICK	COMET (a)		2 2	(a)	MUNAKCH (a)		MAVERICK (a)	COMET	_
	1477	rtos	ANL			3.00			3.00								STD	3.00		and days	9 70				3.00		
		DRIVILINE RATIOS	TRANSMISSION	(C-3(c)	Speed	2.47 1.47 (c)	(R) 2.11		SPEED 2.46 1.46 (c)	1.00 (R)2.19		(DISCONTINUED)						SPEED 3.56	(a) 1.90	_'¬	SPEELD 20	<u> </u>	(a) 1.84 (00 0) .81	(R) 3.29	3- SPEED 2.46	(a)1.46 1.00 (R)2.19	
~		CAR	MODITE	1				1					Ē	NAVI-RTCK COMET	(OPT) CRANADA	MONARCH	1								MAVERICK (a)	COMET	
MODEL YEAR	1976	TIOS	ANLE.					L				_ =	7	3,00	(OPT)		 -								C-4	3.00 (OPT)	
MO.		URIVELING RATIOS	TRANSMISSION									SEMI-CENTRIFU	SINCLE DISC 3- SPEED	2.99	1.00	(R) 3.17	 								3- SPEED 2.46	(a)1.46 1.00 (R)2.20	
		CAR	MODFLS										3.00(a) COMET	GRANADA	MAVERICK	MONARCH									MAVERICK	3,00 (a) LOMET	
	1975	TIUS	AXLE					1					3.00(4	2.79(3)			Ī								2.79(a	3.00(a	
PAGE 4		DRIVELINE RATIOS	TRANSMISSION AXLE					! ! ! ! ! !					3- SPEED 2.99	1.75	1.00	(R)3.17									3- SPEED 2.46	1.46 1.00 (R)2.20	
FORD	ENGINE	(TRANS, TYPE)		V-6 (600) (AUTO	170, 8C1D-VV (VARIABLE VENTEREY	VENTURE		(AUTOMATIC)			1L-6 200CID-1V	(WANDAL)					(MANUAL.)				(SWONDY)				(AUTOMATIC)		

FORD ENGINE-TRANSMISSION-REAR AXLE PRODUCT SCHEDULE, 1975-80 (CONTINUED) FIGURE B-1.

		CAR									
8/1/78 AC-CTP	1980	DRIVELINE RATIOS TRANSMISSION AXLE									
REVISED: 8/1/78		CAR MODELS TR			-						
REVI	1979	DRIVELINE RATIOS TRANSMISSION AXLE			-						
	1978	TRANSMISSION AXLE MODELS	SELECT SHIPT (C-3) SPEC 2.47 SPEC 3.73(1) SPEC 3.73 SPEC	3.08			(DISCONTINUED)	4- SPEED 3.29 3.00 CRANAOA 1.84 (1) HONARCH 0D 0.81 (R) 3.29	3- SPEED 2.46 b) 2.47 CRANADA 1.46 b) 2.50 MONARCH	(R) 2.19	
	1977	TRANSMISSION AXLE MODELS		(DISCONTINUED)			1-00 2.79 MAVERICK 1.00 1.00 4	Che (Nu Ve) Che (Nu Ve)	3- SPEED 2.46 2.79 MAVERICK COMET	(R) 2.19 GRANADA MONARCH	2.47 CRANADA (a) HONARCH 2.50 (LOCK)
MODEL YEAR	1976	DRIVELINE RATIOS CAR TRANSMISSION AXLE MODELS		SEMI-CENTRIFUGAL SINGLE DISC	3- RTF/D 2.99 2.79 NAVERICK 1.75 3.00 COMET 1.00 (OPT) WONARCH	(R) 3.17 GRANADA			3- C-4 J. SPERICK 1.46 3.00 COMET	I.00 (OPT) GRANADA (R) 2.20 NONARCH	
Page 5	1975	DRIVELINE RATIOS CAR TRANSMISSION AXLE MODELS			3- SPEED 2.99 3.00 CONET 1.75 MAVERICK 1.00 7.00 GRANADA	(R) 3.17 (a) MONARCH 2.79			3- SPEED 2.46 3.00 COMET 1.46 MAVERICK	(R) 2.20 10PT: MONARCH	2.79
PORU	ENGINE	TYPE AND SIZE (TRANS, SIZE)	(CONT) 11-6 200CID-1V (AITORATIC)	IL-6 250CID-IV		CATIGNAM	CHAINNEY	(more)	(АСТОМАТІС)		

FORD ENGINE-TRANSMISSION-REAR AXLE PRODUCT SCHEDULE, 1975-80 (CONTINUED) FIGURE B-1.

TP	٦	CAR MODELS	
devised; 8/1/78 AC-CTP		14	
ISED: 8/	1980	DRIVELINE RATIOS RANSMISSION AXLE	
AEV		DRIVELINE RA TRANSMISSION	
		CAR	
	676	ω	
	61		
		ORIVELINE RA TRANSMISSION	
		CAR	PALEMONT GRANADA MONANCI MOSTANG II ZERNYR T.TO II (1) TBIRD
	1978	T10S ANLE	2.2.47 2.2.47 2.2.500 2.2.500 3.0.600 3.0.600 3.0.600
		DRIVELINE RATIOS TRANSMISSION AXL	3-5 PEC 2.46 1.00 (R) 2.19 2.60 (R) 2.20 (R) 2.20 (R) 2.20
	_	1	
		CAR	2.79 COUGET 2.79 COUGET 2.70 (1) WISSING II OT : (4) COUGET 2.70 (4) COUGET 2
	1977	A AXLE	2. 7. 7. 7. 7. 7. 7. 7. 7. 7. 7. 7. 7. 7.
		ORIVELINE RATIOS TRANSMISSION AXL	3- SPEGO (R) 2.19 (R) 2.19 (R) 2.19 (R) 2.19 (R) 2.10 (R)
	_	L I	
NR.		CAR	2.79 COURT 1.79 COURT 1.70 C
MODEL YEAR	1976	RATIOS ON AXLE	10.17
		ORIVELINE RATIOS TRANSMISSION AXLE	(8) 2.1.6.6 (8) 2.1.6.6 (9) 2.1.0.6
	_	CAR MODELS	В
		<u></u>	
	1975	ORIVELINE RATIOS TRANSMISSION AXLE	
PAGE 7		ORIVEL! TRANSMI	3-FEE - SPEE 1.46 (R) 2.20
	i.	SIZE TYPE)	711C)
FORD	ENCTAR	TYPE AND SIZE (TRANS. TYPE)	(AUTOMATIC)
			B-8

		S	
		CAR	
Ь	1980	VT10S AXLE	
8/1/78 AC-CIP		DRIVELINE RATIOS TRANSMISSION AXI	
		TRANS	·
REVISED:		CAR	
	1979	AXLE	
		DRIVELINE RATIOS TRANSMISSION AXL	
		DRIV	P
		CAR MODELS	2.77 FAT PROPERTICAL TO THE PROP
	1978 .	12]	2.57 FAT (1.02c) (1.02
	19	t-	
		DRIVELINE RA TRANSMISSION	SPEE 2.46 (R) 2.19 SPEE 2.40 (R) 2.19 (R) 2.00 (R) 2.00
	_	CAR	(A) (B) (A) (B) (A) (A) (A) (A) (A) (A) (A) (A) (A) (A
			C-4 C-4 MONTELCK MONTEL
	1977	RATIOS ON AXLE	2.77 (4) 2.77 (4) 2.77 (4) 2.77 (4) 2.77 (4) 2.77 (4) 2.77 (4) 2.77 (4) 2.77 (4) 2.77 (4) 2.77 (5) 3.00 (4) 2.75 (5) 3.00 (4) 2.75 (5) 3.00 (4) 2.75 (5) 3.00 (4) 2.75 (5) 3.00 (4) 2.75 (5) 3.00 (4) 2.75 (5) 3.00 (4) 2.75 (5) 3.00 (4) 2.75 (5) 3.00 (4) 2.75 (5) 3.00 (4) 2.75 (5) 3.00 (4) 2.75 (5) 3.00 (5) 3.00 (6) 3.0
		DRIVELINE RATIOS TRANSMISSION AXI	3- 1.46 1.46 1.06 (R)2.19 (R)2.00 (R)2.00
	-		
		CAR MODEL,S	UCAR (H) REGO RINO
MODEL YEAR	1976	AXLE	ENX 2.75 (PG
MOD		DRIVELINE RATIOS TRANSMISSION AXI	
		DRIVE	3 PEED 2.40 1.67 1.00 (R) 2.00
		CAR MODELS	3.00 ELITE (M/H) LUCKINC 1.00 (A)COUCAR (W) LUCKINC (WATEGO (W) LUCKINC (W) LUCKINC (WATEGO (W) LUCKINC (W) LUCKIN
			3.00 ELITE (M/W 10.00 (M) COUCLAR (M) 10.00
	1975	E RATIOS	3.00 1.00KI 1.00KI 1.00KI 1.00KI 1.00KI 1.00KI 1.00KI 1.00KI 1.00KI 1.00KI
PACE 8		DRIVELINE RATIOS TRANSMISSION AXLE	SPEED 2.46 11.46 (R)2.18
P	_		
9	ENCINE	TYPE AND SIZE (TRANS, TYPE)	(AUTOMATIC) (AUTOMATIC) (AUTOMATIC) (AUTOMATIC) (AUTOMATIC)
FORD		E	8-4 8-4 8-4 8-4 8-4 8-4 8-4 8-4 8-4 8-4

AC-CTP		CAR	
8/1/18	1980	rios Axle	
REVISEO: 8/1/78 AC-CTP		ORIVELINE RATIOS TRANSMISSION AXI	
		CAR	
	6261	AXLE	
		DRIVELINE RATIOS TRANSMISSION AXL	
		CAR	FORD (4) MERCURY (1)
	1978	FIOS	(1.000 × 2.50 × 1.00 ×
		ORIVELINE RATIOS THANSMISSION AXI	(DISCONTINUED)
		CAR	2.47(4) FORD (H) 2.47(4) FORD (H) 0.71(4) FORD (H) 1.00(KING 2.47(4) FORDANDA (W) 0.71(4) 2.47(4) FORDANDA (W) 0.71(4) 2.47(4) FORDANDA (W) 2.50(4) 2.50(4) 2.50(4) 2.50(4) 2.50(4) 2.50(4) 2.50(4) 2.50(4) 2.50(4) 2.50(4) 2.50(4) 2.50(4) 2.50(6) 2.50(6) 2.50(6) 2.50(7) 2.50(7) 2.50(7) 2.50(7) 2.50(7) 2.50(7) 2.50(7) 2.50(7) 2.50(7) 2.50(7) 2.50(7) 2.50(7) 2.50(7) 2.50(7)
	1977	AXLE	2.47(8) 1 2.47(8
		DRIVELINE RATIOS TRANSMISSION AXL	SPECTO (R) 2.19 (R) 2.19 (R) 2.19 (R) 2.19 (R) 2.18
AR		CAR	ELITE (H) ELITE (H) ELITE (H) ELITE (H) FONTEGO (H) FONTEGO (H) TORINO (H) TORINO (H)
MODEL YEAR	1976	ATTOS A AXLE	13.13 (1.2.13.13.13.13.13.13.13.13.13.13.13.13.13.
Σ		ORIVELINE RATIOS TRANSMISSION AXI	Sperior (8) 2, 20 (8) 2, 20 (9) 4, 46
		CAR	ELITE (H/H DONTECO (C) COURT (
	1975	VATIOS N AXLE	100 100 100 100 100 100 100 100 100 100
PAGE 9		DRIVELINE RATIOS TRANSMISSION AXLE	7.8EE0 1.46 1.06 1.00 (R) 2.20 (R) 2.18 (R) 2.18
FORD	ENGINE	TYPE AND SIZE (TRANS, TYPE)	(AUTOWATIC) (AUTOWATIC)

		CAR		
REVISEO: 8/1/78 AC-CTP	1980	ORIVELINE RATIOS TRANSMISSION AXLE		
REVISEO		CAR MOOELS		
	1979	ORIVELINE RATIOS TRANSMISSION AXLE		
	1978	DRIVELINE RATIOS CAR THANSMISSION AXLE MODELS	SPEE 2.46 2.50(L) COUGAR 1.46 2.75(g) LTD TL 1.00 2.00(d) PERUNY 1.00 2.18 2.05(f) PERUNY 1.00 2.00(d) PERUNY 1.00 3.00(d) PERUNY 1.00 3.00(d) PERUNY 1.00 4.00(d) PER	FDED 2.40 2.47 (4) FORO 1.47 2.50 (4) FORO 1.47 2.50 (4) FORO 1.10 E.75 (R) 2.00 E.75 (R) 2.00 (4) E.00
	1977	DRIVELINE RATIOS CAR TRANSMISSION ANIE MODELS	2.50 (COUCAR) 3.00(%) LTD II 0PT: 2.75 (T-5IRD) 2.47(c) FORD 2.75(c) FORD 0PT: 2.75(See 10 S
MODEL VEAR	1976	DRIVELINE RATIOS GAR TRANSMISSION ANLE MODITS	1.46 2.75 COUGAR 1.46 0PT; ELITE 1.00 3.25 FORD 1.00 3.25 FORD 1.00 3.25 FORD 3.25 FORD 3.25 FORD 3.25 FORD 5.20 FOR	COUGAR ELITE HERCURY HERCURY
PAGI; 10	1975	DRIVELINF RATIOS CAR TRANSMISSION ANLE MODELS	(K) 2.18 (ELUE) 1.00 COUGAR 1.00 COUGAR 1.00 I.00 II.00 II	FIFE 40 3.00 COUGAR 1.47 L.47 L.00 LOCKING 1.00 LOCKING 1
F.0R0	ENCINE	ĒĐ	(317, 197)	

		CAR	
ξŢ	0861	SO	
REVISED: 8/1/78 AC-CTP	61	DRIVELINE RATIOS TRANSMISSION AXLE	
1/8 :		NUBLIN	
EVISED	_	TRA	
2		CAR	
	1979	AXLE	
	-	DRIVELINE RATIOS TRANSMISSION AXLE	
		RIVELI	
	-	T. D	
		CAR	OR N
			FOUL FERCURY LINCOLN MARK V
	1978	DRIVELINE RATIOS TRANSMISSION AXLE	2.15 2.15 2.15 2.15 2.15 2.15 2.15 2.15
		DRIVELINE RATIOS FRANSMISSION AXL	3,44,6 118 (1) (2)
		DRIVE	3- SPERO 2.46 1.06 (1) 1.06 (1) 1.05 (1) 2.15 2.15 2.15
	-	S	
		CAR MODELS	LINCOLIA HARK V HARK V L
	1977	S XI.E	2.75 (4) FORD INCL. 10.0X.ING 3.00 (a) FOR FOR FOR FOR FOR FOR FOR FOR FOR FOR
	19	ORIVELINE RATIOS TRANSMISSION AXLE	# CHP60 P60 P6CH0 #. # CH0
		IVELIN	3-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1
	_	OR	1 3 (8) 1 4 (8)
		CAR	A COLOR OF THE COL
~		HOI	COUGAR ELITE ELITE WARK TO PORTE PONTEGO TORINO TORINO TORINO TORINO
MODEL YEAR	1976	AXLE	C-6 2.75 92.75 92.00 93.00
MOO	i	DRIVELINE RATIOS TRANSMISSION AXLE	ļ ļ
		DRIVEL	3- 572ED 1.46 (R) 2.18
1	_		
		CAR	DOUGAR FEREN BALTE FOREN NOTECOLN MARK TO T-BIRD
			3.00 (*) COUGAR 3.00 (*) COUGAR (*) COUGAR (*) COUGAR (*) COR1100 (*) COR1100 (*) COUGAR
	1975	DRIVELINE RATIOS TRANSMISSION AXLE	3.07
11		ELINE F	997
PAGE 11		DRIV	1- SPEE 2.46 1.46 (R) 2.18
,	_	3) CE	
	ENGINE	TYPE AND SIZE (TRANS. TYPE)	(AUTOWOTIG)
FORD	. 52	TYPE (TRAN	8-13 8-13

APPENDIX C

CHRYSLER ENGINE-TRANSMISSION-REAR AXLE PRODUCT SCHEDULE

TABLE C-1. NOTES FOR CHRYSLER ENGINE-TRANSMISSION-REAR AXLE PRODUCT SCHEDULE

Footnotes:

- Not Available in California (g) Optional in California (a) Not Available in High Altitude only (b)
- (c) (h) Electronic Lean-Burn System California Only (d) (i) Transaxle/Front-Wheel-Drive High Altitude Only
- (R) Reverse (e) Standard in California

(f) Federal Only

Lock-up Torque Converter Available on Some 1978 Models of:

Aspen, Cordoba, Lebaron, Diplomat, Fury, Monaco, Volare, Charger S/E, Magnum XE

Included are: all Federal models except 440 CID V-8,

all California models except 440 CID V-8 and 225 CID IL-6,

no high altitude models.

Ref.: W.E.U. 11/11/77 p. 4.

1976 Models Available with Lean-Burn Engines:

Chrysler 400 CID-4V, Monaco, Gran Fury

1977 Models Available/Equipped with Lean-Burn Engines:

Chrysler: 400 CID-4V, 440 CID-4V Royal Monaco: 400 CID-4V, 440 CID-4V Gran Fury: 400 CID-4V, 440 CID-4V

Cordoba: 400 CID-4V Charger S/E 400 CID-4V

Monaco: 318 CID-2V, 400 CID-4V Fury: 318 CID-4V, 400 CID-4V

Volare: 360-4V

Diplomat/LeBaron: 318-2V

1978 Models Available/Equipped with Lean-Burn Engines:

Volare/Aspen - all except 225 CID all except 225 CID and 360-4V all except 225 CID and 360-4V all except 225 CID and 360-4V Lebaron -Diplomat -Fury -Monaco -

all except 225 CID and 360-4V all except 360 CID-4V Charger S/E -Chrysler -Cordoba -Magnum XE -

REVISEO: 8/1/78 AC-CTP		CAR		
1/8 :1	1980	TOS		
EVISEO		DRIVELINE RATIOS TRANSMISSION AXLE		
		RIVELI		
	_			
		CAR		
	6261	TOS		
		ORIVELINE RATIOS TRANSMISSION AXLE		
		RIVELI		
	_			
		CAR MODELS	3, 909 COLT WACON ARKOW 3, 308 COLT GRALLENGER SAFPORO CHALLENGER	COLT WAGN
		ш	3. 909 COLT V. 3. 908 COLT V. 3. 908 COLT V. 3. 908 COLT V. 3. 5. 5. 5. 5. 5. 5. 5. 5. 5. 5. 5. 5. 5.	3. 309 COLT. 3. 309 COLT.
	1978	DRIVELINE RATIOS FRANSMISSION AXLE	3.309	3.308
		DRIVELINE RA TRANSMISSION	4- SPEE0 2.125 2.193 1.142 5.200 5- SPEE0 2.000 1.316 1.316 1.316 1.316 1.316 1.316 1.316 1.316 1.316 1.316 1.316 1.316 1.316 1.316 1.316 1.316 1.316 1.316	3.525 1.423 1.000 3.867
		TRANS	SPEE0 55 5-0 5-0	SPEE0
		ELS	· ·	
		CAR MODELS	COLT ARROW ARROW	COLT ARROW ARROW ARROW
	1977	TOS	SEIKI CO. (a) (a) (b) (b) (c) (c) (c) (d) (c) (d) (d) (d) (d) (d) (d) (d) (d) (d) (d	(a) (b) (c) (c) (c) (c) (c) (c) (c) (c) (c) (c
			2	T (E)
		DRIVELINE RA TRANSMISSION	4- 5PEED 3.252 3.252 3.213 1.442 5- 5- 5- 5- 5- 1.000 1.316 1.000 1.316 1.000 1.316 1.000 1.316 1.000 1.000 1.000 1.000 1.000 1.000 1.000	3. 86
			(R SPE	S P E E E E E E E E E E E E E E E E E E
		CAR MODELS	COLT ARROW ARROW ARROW	COLT ARROW ARROW
EAR		(ri		
MODEL VEAR	1976	RATIOS N AXLE	3,889	3, 889
-	İ	DRIVELINE RATIOS TRANSMISSION AXL	3.525 2.193 1.442 1.000 3.215 2.000 2.000 1.000 1.000 1.000	0 2.452 2.452 11.000 2.214 3.525 2.193 1.442 1.442 1.442 3.867
		TRANS	FPEED 2. 193 (R. 1.367 (R.	3- 1.452 1.652 1.652 1.652 1.44- 5PED 3.253 1.422 1.422 1.400 (R) 3.867
		r.s		
		CAR	001.1	COLT
	1975	10S AXLE	3.889	3.889
	51	-		
PAGE 1		ORIVELINE RATIOS TRANSMISSION AXI	4- SPEE0 2.193 1.142 1.442 (R) 3.667	3- SPEED 1.452 1.452 1.452 4- SPEED 5-224 1.273 1.493
PAG			4 0	3
	45	D SIZE TYPE)	(MANUAL)	(AUTO) (PANUAL)
CHRYSLER	ENCINE	TYPE AND SIZE (TRANS. TYPE)	(AA)	(AUT)
CH		7	[35C]	11. 10.

CHRYSLER ENGINE-TRANSMISSION-REAR AXLE PRODUCT SCHEDULE, 1975-80 (CONTINUED) FIGURE C-1.

а.											
REVISED: 8/1/78 AC-CTP		CAR									
3D: 8/	1980	TOS AXLE									
REVISE											
		ORIVELINE RA TRANSMISSION			_						
		CAR									
	67	TOS AXLE	-								
	1979	-									
		DRIVELINE RATIOS TRANSMISSION AXE									
		CAR MODELS	ARROW SAPPORO CHALLENGER	ARROW COLT SAPPORO CHALLENGER COLT WAGON		NOZ	NOZJ		AC.		200
		lni			5	(f) 0MN1 (cd) HORIZON	(f) (dd) HORIZON		90 ARROW		5 ARROW
	1978	RATIOS ON AXLE	4.222		1001	3.5	CHRYSLER (1) (1) (2d) (3)		3.909		3.545
		DRIVELINE RA TRANSMISSION	3.215 3.215 2.000 1.316 1.000 0.853 3.667	D 2.452 1.452 1.000 2.214		4- SPEED 3.45 1.29 0.97 (R) 3.17	3- SPEED 2.47 1.47 1.00	2.10	5- SPEEU 3.369 2.035 1.360	1.000 0.856 0.856	3- SPPED 2.452 :02 1.000 (P) 2.213
		TRAI	5- 3 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	SPEED 2 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		speed (R)		2	SPEE	(%	3- SPPE
		CAR MODEL:S	COLT ARROW	COLT	! !		1	.00	OU.F		DI.T.
	1977	ANLE	(a) 3.889 COLT 4.222 ARROW	A-904 (a) 3.545 COLT 3.889 ARROW			!	# E	(a) 3.889 COLF 4.222 ARROW	V-904	(a) 1, 75 fall; 1, 389 MRR0k
		DRIVELINE RATIOS TRANSMISSION AND	5- SPEED 3.215 2.000 1.316 1.000 0.853 (R) 3.667	SPCED 2.452 1.452 1.000 (R) 2.214	 		1	DAIKIN	5- SPEED 3.369 2.035 1.360	0.856 (R) 3.635	3- SPET 12. 12. Lotte (R) 2. 14
24		CAR MODULES	COLT ARROW	COLT	 				COLT ARROW		8.345 COUT ARBINE
MODEL YEAR	1976	TIOS	4.222	3.889					3.889		3.345
UK		DRIVELINE RATIOS TRANSMISSION AND	5- SPEED 3.215 2.000 1.316 1.000 0.853 (R) 3.667	3- SPEED 2.452 1.452 1.000 (R) 2.214	 		1		5- SPEEQ 3.369 2.035 1.360 1.000	0.856 (R) 3.635	3- SPED 2.452 1.452 (R) 2.234
		=	\$ 0	8 8					- N K		~ v.
		CAR		COLT	i				CMLT		T.10°
	1975	TOS AXLE		3.889 (c) 3.545	i		Ì		3.889		3.545 (01.1
	16						i I			856 635	
PAGE 2		DRIVELINE RAT		3- SPEED 2.452 1.452 1.000 (R) 2.214	1		1		5- SPEED 3.369 2.035 1.360 1.000	8 3	3- SPED 2.452 1.452 1.000 (R) 2.214
P,	-			(AUTO)	RSE)		(AUTO)	(AL)		(AUTO)	
CHRYSLER		ENGINE TYPE AND SIZE (TRANS, TYPE)	97.5 (CONT)		114 104,7C1D-2V (1,7\$) (TKANSVFRSE) (MANIAL)			11.7 121.7c1D=1V (1.9952) (MAMML)		(A)	

		CAR					
	1980	9					
REVISED: 8/1/78 AC-CTP		DRIVELINE RATIOS TRANSMISSION AX					
SED: 8/1/		CAR MODELS					
- 1	1979	AXLE					
	10	DRIVELINE RATIOS TRANSMISSION A					
		CAR	ARROU	ARROW	SAPPORO CHALLENCER COLT WACON	3.308 SAPPORO COLT WACON	
	1978	AXLE	3.909	3.545	3.308	52 3.308 S	
		DRIVELINE RATIOS TRANSMISSION AXLE	SPEED 3.369 2.035 1.360 1.000 0.856 (R) 3.615	3- SPEED 2.452 1.452 1.000 (R) 2.214	DALKIN MFG 5-	SPEEG 2.452 1.452 1.000 (R) 2.214	· • · · · · · · · · · · · · · · · · · ·
		CAR	COLT	COLT ARROW	 	 	
	1977	RATIOS	70 CO. 3.809	3.545	1	1	
		DRIVELINE RATIOS TRANSMISSION AXL	5- SFED 3.159 SPED 3.159 1.360 1.000 0.856 (R) 3.635	3- SPEED 2.452 1.452 1.000 (R) 2.214		1	
		CAR	COUT	COLT		• · · · · · · · · · · · · · · · · · · ·	
YEAR	1976	G.E	3.889 Cn	3.545 CO			
MODEL YEAR	16	DRIVELINE RATIOS TRANSMISSION AN	5- SPEKD 3.769 1.000 0.856 (R) 3.635	3- SPEED 2.452 1.452 1.000 (R) 2.214		1	
		CAR		כטרד	 		
	1975		3.889 (017	3.545			
PACE 3	19	DRIVELINE RATI	SPEED 1. 169 2,015 1,360 1,000 1,000 1,005 (R) 3.635	3- SPEID 2.452 1.452 1.000 (R) 2.214			
CHRYSLER		TYPE AND SIZE DRIVELINE RATIOS (TRANS, TYPE) TRANSMISSION AXLE	(VASHAL)	(Al T0)	(TYVIKVK)	(ArTo)	

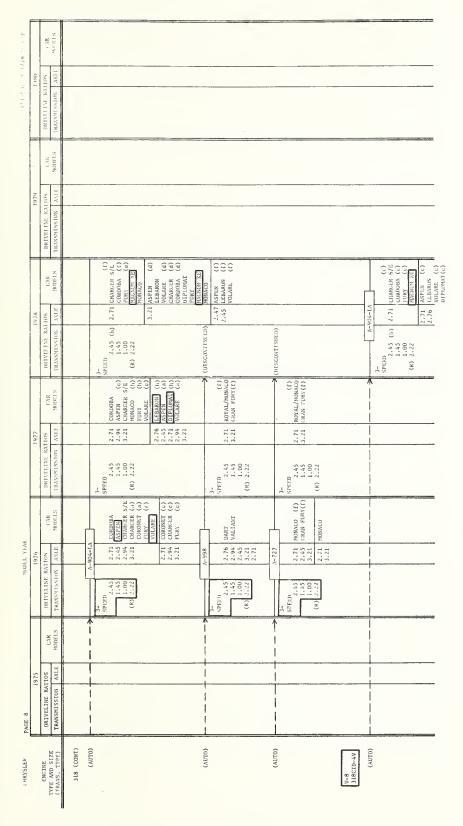
CHRYSLER ENGINE-TRANSMISSION-REAR AXLE PRODUCT SCHEDULE, 1975-80 (CONTINUED) FIGURE C-1.

2-5

2		ST		
REVISED: 8/1/78 AC-CTP		CAR		
1: 8/1/	1980	WATTOS 4 ANLE		
REVISEL		DRIVELINE RATIOS TRANSMISSION AND		
	_	TRAN		
		CAR		
	1979	TOS AXLE		
	-	DRIVELINE RATIOS TRANSMISSION AXL		
		DRIVE		
		CAR MODELS	IN (b)	ASPEN (b) VOLARE (c, d) ASPEN (c, d) LEBARON (c, d) DIPLOMATC (d)
		щ	3.23 ASPEN	
	1978	E RATIOS ION AXLE		2.72 3.23 3.23 3.23
		DRIVELINE RATIOS TRANSMISSION AXL	4- SPEED 3.09 1.67 1.00 0.71 (R) 3.00	3- SPED 2.65 1.05 (R) 2.22
		1	. (3)	9.0
		CAR	ASPEN	ASP EN ASP EN VOI ARE
	1977	AT 10S AXLE	A-390 3.23 3.21 2.94	2.2.2.2.2.3.2.2.2.2.2.2.2.2.2.2.2.2.2.2
		DRIVELINE RATIOS TRANSMISSION AND	SPEED 3.09 1.67 1.00 0.71 3.00)- SPEE2.45 1.45 (R) 2.22
		DRI	4- S 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	(a) 2 1 1 1 2 1 1 1 2 1 1 1 2 1
		CAR MODELS		AASER (D. VALLANT (D. VALLANT (C. VALLANT
MODFL YEAR	1976	TOS		
COK		DRIVELINE RATIOS TRANSMISSION AXL		23.8.5.5
		DRIVE		SPEED 2.45 SPEED 2.45 11.45 (RR 2.22
		CAK		TEM
		щ		(a) 0000NET (b) 1.21 0000NET 2.94 FURY 2.75 DAFF 2.70 ALANT 3.21 3.23
	1975			
PAGE 5		DRIVELINE RATIOS TRANSMISSION AXI		SPEED 2.45 1.45 3.68 2.00 (R) 2.00 (R) 2.00
		IZE PE)	MANUAL)	
CHRYSLER	ENGINE	TYPE AND SIZE (TRANS. TYPE)	225 (CONT) (HANUAL)	
ਝ		EE :	225 (CON	
				The second state of the second

8/1/78 AC-CTP		CAR								-								
REVISED: 8/1/	1980	DRIVELINE RATIOS	-															
		CAR																
	6261	DRIVELINE RATIOS	IKANSHISSION AALE															
		CAR		11 ASPEN (f)	VOLARE (f)	FURY (f)	11 ASPEN (f) 13 LEBARON (f) DIPLOMAT (f)		VOLARE (f)	1 LEBARON (f)	T FURY (f) MDNACO (f)							
	1978	DRIVELINE RATIOS	TRANSALSSION AXL	PEED 3.21	(R) 3.00	PEED 3.21	(R) 2.90 3.21		SPEED 2.45 2.94	1.45 2.71	(R) 2.22 2.71							
		CAR	STATION	ASPEN (f)		S			ASPEN (f)	VOLARE	FURY (f)		ASPEN	FURY (f)				
	1977	DRIVELINE RATIOS	INVESTIGATION AND	SPEED 3.21 1.67 3.21	1.00 3.23 0.71 (R) 3.00			4-904	1	1.45 2.94 1.00 3.21			3- SPEED 2.94	1.00 (R) 2.90			.	
ac.		CAR	CTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTT										ASPEN (f)	VALIANI (f)	CORONET/ (f) CHARGER (f) FURY (f)	DART		
MODEL YEAR	1976	DRIVELINE RATIDS	I KANSALSSI DN AALE										7	1.00 2.94		3.23	3.21	
		CAR	ADDECS										CORONET	LONI	DART VALIANT			
	1975	DRIVELINE RATIOS	HISSION WITE					-					.08 2.71	3.21	2.45			
PAGE 6	_	DRIVI	+	l 	·								T) 3- SPEED 3.08	· ri	(R) 2.90			
CHRYSLER	ENGINE	TYPE AND SIZE (TRANS, TYPE)	1L-6 225CID-2V	(MANUAL)				(offite)	(0104)			V-8 318CID-2V	(MANUAL)					

	CAR	
1980	ORIVELINE RATIOS TRANSMISSION AXLE	
	CAR	
1979	ORIVELINE RATIOS TRANSMISSION AXLE	
1978	DRIVELINE RATIOS CAR TRANSMISSION AXLE MODELS	
	CAR	VOLARE (E)
1977	DRIVELINE RATIOS TRANSMISSION ANLE	#
1976	DRIVELINE RATIOS CAR TRANSMISSION ANDE MODELS	AALIANT (D)
1975	DRIVELINE RATIOS CAR TRANSMISSION ANLE MODELS	OART VALTANT CORONET CHARGER CHRODA FURN CRANFTRY CRANFTRY NALTANT VALTANT
ENGINE	-	118 (CANT) CAUVIAL) SS SS SS SS SS SS SS SS SS SS SS SS SS
		C-8



	-					
REVISED: 8/1/78 AC-CTP		CAR				
8/	1980	OS				
EVISED	15	E RATI				
2		DRIVELINE RATIOS TRANSMISSION AXLE				
	=	=+-				~ · · · · · · · · · · · · · · · · · · ·
		CAR				
	6261	TIOS				
		INE RA				
		DRIVELINE RATIOS				
ĺ		R ELS		S/E (f) (f) (f) xE (f)	N (E) AT(E) AG(E)	
		CAR		2.45 CHARGER S/E (CORDOBA (f) 2.71 HAGNUM XE (CHRYSLER (f)	ASPEH (f) LEBARON (f) DIPLOHAT(f) FURY HONACO (f) WONACO (f) HONACO (f) HONACO (f) HONACO	
	1978	FOS		2.45 0	2,45	
		NE RAT		2	()	
		DRIVELINE RATIOS THANSMISSION AXLE		\$PEED2.45 1.45 1.00 (R) 2.22	SPEED 2.45 1.45 1.00 (R) 2.22	
	_	_		(f) (s) (l) (l) (l) (l) (l) (l) (l) (l) (l) (l	(4) (3) (4) (4) (4) (4) (4) (4) (4) (4) (4) (4	(E)
		CAR		ROYAL (f) MONACO CRAN FURY(f) CHARCER S/E (f)	ASPEN VOLARE MONACO FURY	ROYAL HONACO (£) CRAN FURY(£)
	1977	TOS		2,71		2.71
		DRIVELINE RATIOS				
		RIVELI		20 2.45 1.45 1.00 1.00	\$PEED_45 1.45 1.00 (R) 2.22	3- SPEED, 45 1.45 1.00 (R) 2.22
	_	D TR		f) SPEED (R)	(f) SPI (R) (F) (F) (F) (F) (F) (F) (F) (F) (F) (F	SPE SPE
		CAR		CHRYSLER (£) CORDOBA (C) CHARCER/ CORONER FONMOO (£) CRAN FURY		
AR				CHRY CORD CHAR CHAR MONA GRAN	ASPEN VOLAR CHARG FURY	
MODEL YEAR	1976	AXLE		2.71 2.45 3.21 3.21	2.71 2.45 2.45 3.21 2.71 2.71 2.45 3.21	
NO.		INE RA	I NUED)	1 1		
		DRIVELINE RATIOS	(DISCONTINUED)	STEED 2.45 1.05 (R) 2.22	Spen) 2.45 1.45 1.00 (R) 2.22	
	-		Δ ω	M2	H5 -	
		CAR	CORONET CHARGER S/E CHARGER S/E CHANDBA FURN NONACO			
			CHAP		<u> </u>	
	1975	ATTOS AXL	(a) 2.71 2.71 2.45 3.21			
		INE R	TORQUE FLITE En 2.45 2.1.45 2.20 3.2.20			
PAGE 9		DRIVELINE RATIOS TRANSMISSION AXLE	- TURQUE 1 SPRED 2.45 1.45 1.00 (R) 2.20			
PA	_	-	(0)	(A.ITO)		
CHRYSLER	4	TYPE AND SIZE (TRANS, TYPE)	V-8 360cID-2V (AU'	3	-	
CHRY	F14.47	TYPE AND SIZE (TRANS, TYPE)	3600			
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ſ	_		-								_							_	
		CAR	COURTS																
		1																	
C-CTP	1980	DRIVELINE RATIOS	ON AXLE								_								
8/1/78 AC-CTP		VELINE	TRANSMISSION																
- 1		DRI	TRAN																
REVISED:		CAR	COEFFS																
		_	#																
	1979	RATIOS	TRANSMISSION AXLE													_			
		DRIVELINE RATIOS	SMISSIO																
		DRI	TRAN		_		. 12												
		CAR	ners.			(f) CHARGER S/E	CORDOBA (f)												CHRYSLER (4) (4) CHARGER S/F CHARGER S/F CHARGER S/F CORDOBA (6) CHARGER S/F CORDOBA (6) HANNUT KE(2)
			_	_	L	CHAR	CORD												CHRYSLE CHARGER CORDOBA HAGNUM CHARGER CHARGER CORDOBA HAGNUM
	1978	WTIOS	TRANSMISSION AXLE		_	2.45													3.21
		DRIVELINE RATIOS	MISSIO			2.45	1.45 (h)	2.22											2.22 2.22
		DRIV	TRANS		7			8											3 <u>PEED</u> 1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.
		CAR	SEL 2			(f) CHARGER S/E	-												OHYSLER(c,d) 1,45 1,45 1,45 1,46 1,40 1,40 1,00
	1977	VIIOS	TRANSMISSION AXI,E		A-999	2.45	3.21												2.71 3.21 2.71 2.71 2.45 3.21
		DRIVELINE RATIOS	NOISSI	-	7	4.5	4.5	22											2.22 2.22
		DRIVE	TRANSP			SPEED	1.45	(R) 2.											(R)
	-	α:	27																୍ତ୍ର ^{ଖ୍} ତତତ୍ରିତ ନ
×	Ì	CAR	MOD		! 														CHRYSLER (C) (C) (C) (C) (C) (C) (C) (C) (C) (C)
NODEL YEAR	9261	TIOS	AXLE															702-4	
MOI		DRIVELINE RATIOS	TRANSMISSION AXLE							(INUED)								_	2.22
		DRIVE	TRANSM		1					(DISCONTINUED)									SPEED 2.4.5 (R) 2.22
Ī		~ :	2		-			-	-	Î		R S/E	¥ K	URY (a)		T	н	4	
		CAR	MODE		į Į					[2]	J. Control	CHARGER S/E	CHKYSLE FURY CORDOBA	GRAN FURY(a)	MONACO	DART	VALIANT	1	
	1975	L10S	AXLE							TORQUE FLITE	2 73	2.45	3.21	3.21	3.21		3.21	1	
	-	DRIVELINE RATIOS	NOISSI							TOR	Ş	2 4 6	2 8			57	1.45 1.00 2.00	. !	
PAGE 10		DRIVE	TRANSMISSION AXLE		 						PEED ,	1.45	(R) 2.			ŠPEED 2.	1. (R) 2.		1
L		_	E	10	(AUTO)				٥	(AUTO)	100					-14/1	-	(ATTO)	
CHRYSLER	FNCINE	D SIZE	360 (CONT.)		3				V-8 360CID-4V									,	
S	FNC	TYPE AND SIZE	, thous,	•					> ñ										
			H												1]				

CHRYSLER ENGINE-TRANSMISSION-REAR AXLE PRODUCT SCHEDULE, 1975-80 (CONTINUED) FIGURE C-1.

		R ELS				
		CAR				
al.	1980	RATIOS N AXLE				
REVISED: 8/1/78 AC-CTP		ORIVELINE RATIOS TRANSMISSION AXI				
TSED: 8/	_	Н				
REV		CAR				
	1979	ATIOS				
		ORIVELINE RATIOS TRANSMISSION AXL				
	_	_	(d) (d) (d) (d) (d) (d) (d) (d) (d) (d)		(d) X S/E X (d) XE(d) (c) (c) X S/E X S/E X S/E	
		CAR MOOELS	ASPEN (1) (b) ASPEN (1) (c) ASPEN (d		5 8 8 E 5 8 E	
	1978	AT LOS AXLE	3.21 2.71 3.21 3.21 3.21	<u> </u>	3.21	
		DRIVELINE RATIOS TRANSMISSION AXI	3- SPEE0 2.45 1.45 1.00 (R) 2.22	(OISCONTINUEO)	3PEE0, 2.45 1.45 1.00 (R) 2.22	
	-		(a) (b)		(c) (c) (s/E)	
		CAR	MONACO FURY ASPEN VOLARE	ROYAL (c,d) MONACO GRAN FURY	CORDOBA (c) (c) CHARGER S/E	
	1977	AXLE	2.71 2.71 3.21 3.21 3.2 2.7 2.9 2.45	A-998 2.71 3.21	A-999 2.71 2.45 3.21	
İ		DRIVELINE RATIOS TRANSMISSION AXI	0 2.45 1.45 1.00 2.22	\$PEE0 1.45 1.00 (R) 2.22	SPEED, 45 1.45 1.00 (R) 2.22	
	_	TRA	3- SPEEO - 2.4, 1.41 11.00 (R) 2.22	₹ SPEE	SPEE (R)	
		CAR	FURY (c)			
MODEL YEAR	1976	TIOS	A-904-LA 2.71 2.45 3.21			
MO		ORIVELINE RATIOS TRANSMISSION AXI	T			(OISCONTINUEO)
		ORIV	3- SPEED 1.45 1.00 (R) 2.22			001800
		CAR		!	1	10E FLITE (a) (b) (c) (c) (d) (d) (d) (d) (d) (d) (d) (d) (d) (d
	1975	TIOS	1			108QUE FLITE 2.72 CC 2.72 CC 3.21 CG 3.21 GG 9 CG 3.21 GG 9 CG 9 CG 9 CG 9 CG 9 CG 9 CG 9 CG 9
j	19		1	İ		TOR
PAGE 11		ORIVELINE RA TRANSMISSION	1 1 1		1	3-60 SPEEO 2.45 1.00 (R) 2.20
SR	6	SIZE YPE)	(A3TO)	(AUTO)	(АИТО)	(AUTO)
CHRYSLER	FNGINE	TYPE AND SIZE (TRANS. TYPE)	360 (CONT)			V-8 400CID-2V
		7	m			

CHRYSLER ENGINE-TRANSMISSION-REAR AXLE PRODUCT SCHEDULE, 1975-80 (CONTINUED) FIGURE C-1.

- 1	-			
		CAR		
TP	1980	AXLE		7
8/1/78 AC-CTP	1			
8/1/7		ORIVELINE RA TRANSMISSION		
REVISED:	_	H		
REV		CAR		
	6.4			
	1979	ORIVELINE RATIOS TRANSMISSION AKLE		
		VELINE		
		ORI		
		CAR	CHRYSLER FURY MAC, HONACO WAC, CORDOR S/E CORDOR S/E CORDOR WACOVER E MACKION XE MACKION XE MACKION XE	(h)
		C/A	CHRYSLER HONACO MAC. CORDOBA FERW HONACO	CHRYSI
	1978	AXLE	(f) (f) 2.45	(b) 2.31 3.21
		DRIVELINE RATIOS FRANSMISSION AXI	25 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6	(G
		DRIVELINE RAT	3-6 SPED 2-45 1-45 (R) 2-22	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$
	-			*
		CAR MODELS	CRN SLER CONMONS CONMONS FOR ALT FOR HOMACO GMN FIRY	CHRYSLER GRAN FURY BOYAL HONACO WOMAL HOMACO GRAN FURY
-	7	ш	(f) CH (G	
	1977	DRIVELINE RATIOS RANSMISSION AXLE	(h) 2.5	(h) 3.21 A-998 (h) 3.21 (h) 3.21 (h) 3.21
		DRIVELINE RA TRANSMISSION	22 22	22 22 22 22 22
		TRAN	3-6-6-6-6-6-6-6-6-6-6-6-6-6-6-6-6-6-6-6	SPEEQ 45 245 1.05 (R) 2.22 SPEEQ 45 1.45 (R) 2.22
		R (LS	CHRYSLER (h) CHRYSLER (c) CHARCER (c) CHARCER (c) CRANCER (c) CORONET (C) CRANCER (c) CORONET (C) CORO	S &
		CAR	CHRYSLER COROUSA COROU	CHRYSLER HOWACO GRAN FURY
SODEL YEAR	1976	TOS AXLE	A-727 2.45 3.21 3.21 3.21	3.21
MODE	-			
		DRIVELINE RAT	SPED 2.45 1.45 1.45 (R) 2.22 (R) 2.22	SPEED 2.45 2.45 11.05 (R) 2.22
	4	TR	<u> </u>	1
		CAR MOOELS	TTE GHYSLER(a) INFERIAL GRAVE FOR YOUNG FOR YOUNG FOR YOUNG YOU WORNED YOU WORNED YOU WOUNG YOU WAS AND YOU WHAT YOU WOUNG YOU WAS AND YOU WAS A	
			TTE CHRY. INPE. GAMM HONA	
	1975	ANLF	10NQUE FLITE	
		INE RA	1.45 1.45 1.20 1.20	
PV3 13		DRIVELINE RATIOS TRANSMISSION AND	1 1124	
-				
ChrisLLR	ENGINE	TYPE AND SIZE (TRANS, TYPE)	(OTIA) (ATIA) (ATIA) (ATIA)	(NTP)
Chri	FNG	YPE AN	0007 8 - 7 - 0-4-4	

APPENDIX D

AMERICAN MOTORS ENGINE-TRANSMISSION-REAR AXLE PRODUCT SCHEDULE

TABLE D-1. NOTES FOR AMERICAN MOTORS ENGINE-TRANSMISSION-REAR AXLE PRODUCT SCHEDULES

- (a) Not available in California
- (b) Not available, high altitude
- (c) California only
- (d) High altitude only
- (e) Standard in California
- (f) Canada only
- (g) Optional in California
- (h) Only ratio available for sportabout in California
- (i) A.I. 2/1/77 p. 14.
- (j) Chrysler
- (k) W.E.U. 5/29/77 p. 6
- (1) Dropped V-8, W.A.R. 3/1/76
- (m) Porsche 4 cylinder transaxle 924 engine, W.E.U. 5/27/77
- (n) W.A.R. 4/25/77 p. 131
- (o) W.A.R. 8/11/75 p. 253
- (p) W.A.R. 7/21/75 p. 220
- (q) W.E.U. 1/21/77 p. 5. (assumption)
- (R) Reverse
- (s) 49 States (federal) only

ſ		CAR	DELS	
	1980	Н	AXLE MO	
1	19		TRANSMISSION A	
CTP Page 1		DRIVE	TRANSM	
8/1/78 AC-CTP		CAR	MODELS	(u) 66
	6261		AXLE	MID-YEAR INTRO 179
2.		DRIVELINE RATIOS	TRANSMISSION	JAN-OIM —
Ī		CAR	MODELS	CREMIN GREMIN
	1978	S01.1	ANLE	3.31 (c) (d) (d) (d) (d) (d) (d) (d) (d) (d) (d
		DRIVELINE RATIOS	TRANSMISSION	## 100 100
F		CAR		4 8 8 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
	7	_		3.31 GREPLIN 3.31 GREPLIN 3.31 GREPLIN
	1977	DRIVELINE RATIOS	TRANSMISSION AXLE	3.31 NI NIED)
		DRIVEL	TRANSMI	(R) 3.50 5.21 1.43 1.43 1.43 1.00 (R) 3.39 (R) 2.20 (R) 2.20 (R) 2.20 (R) 2.20
		CAR	MODELS	PAGER PAGER
MODEL YEAR	1976	rios	AXLE	2.73
MOI		DRIVELINE RATIOS	TRANSMISSION AXLE	MARNER CEAR 1 1 1 1 1 1 1 1 1 1
-	-	CAR	-	
	1975			2.73 GREMI MARNET 1AYCOCK 0.D. PACER 0 3.08 NORNET 2.73 GREMI 2.73 GREMI 2.73 GREMI 0 3.08 NORNET
	-	DRIVELINE RATIOS	TRANSMISSION AXLE	3- 5pd 3.100 (R) 2.636 (R) 2.636 (R) 2.990 (R) 3.170 (R) 3.170 (R) 3.170 (R) 3.170
ا	ENCINE	TYPE AND SIZE	7	(HANUAL) (HANUAL) (HANUAL)
AMC		TYP	111	II-4 (W-AUDI) (W-AUDI

AMERICAN MOTORS ENGINE-TRANSMISSION-REAR AXLE PRODUCT SCHEDULE, 1975-80 (CONTINUED) FIGURE D-1.

		CAR			
	1980	RATIOS ON AXLE			
Page 2		DRIVELINE RATIOS TRANSMISSION AXLE			
		CAR			
Revised: 8/1/78 AC-CTP	1979	ATIOS			
Revise		DRIVELINE RATIOS TRANSMISSION AXLE			
		CAR		GREMIN CONCORD PACER	GREM.IN CONCORD PACER
	1978	AT IOS AXLE		2.53(%)	2.73(6)
		DRIVELINE RATIOS TRANSMISSION AXLE		4- Spd 3.50 2.21 1.43 1.00 (R) 3.39	3- 8pd 2.99 1.75 1.00 (R) 3.17
		CAR MODELS		GREMIN GREMIN PORNET	GREMLIN HORNET PAGER
	1977	AXLE		(a) (b) (c) (d) (d) (d) (d) (d) (d) (d) (d) (d) (d	2 (a) (b) 3.08 H(c) (d) 3.08 (d) 3.08 (d) 3.08 (d) 3.08 (d) 3.08 (d) 3.08 (d) 4.00 (
		DRIVELINE RATIOS TRANSMISSION AXLE	######################################		1.75 1.75 1.70 1.75 1.70 1.75 1.70 1.
		CAR		2.73 CREDILIN 2.73 CREDILIN 2.43 3.08 2.53 3.08 3.08	
MODEL YEAR	1976	N AXLE	LAYCOCK 0.D. 2.73 GRE 2.73 FAR 3.08 HOR 2.73 GRE 2.73 GRE 2.73 GRE 2.73 GRE 2.73 GRE 2.73 FAR 2.08 HOR 2.08 HOR	2.73 (a) 2.53 (d) 3.08 2.73 2.73 2.73 (a) 2.73 (d) 3.08	
M		DRIVELINE RATIOS TRANSMISSION AXI	Spd 2.99 L75 L75 L70	2.21 2.21 1.43 1.00 (R) 3.39	
		CAR	PACER		
	1975	ATIOS AXLE	2. 7.3 3.08		
		DRIVELINE RATIOS TRANSMISSION AXL	3- 5p1 2.99 1.75 1.75 (R) 3.17	! !	
AMC	THE POINT	TYPE AND SIZE (TRANS, TYPE)		(PANUAL)	(Takinga)

	_				
		CAR			
	1980	TOS			
Page 3	1	DRIVELINE RATIOS TRANSMISSION AXI			
8/1/78 AC-CTP		CAR			77
Revised:	1979	ORIVELINE RATIOS TRANSMISSION AXLE		·	
9	-	CAR MODELS 1	S) CREPLIN CONCORD F) PACER CONCORD WAGON		GREMLIN CONCORD PACER
	1978	AXLE	2.53(\$)		6.8ECK (4) 2.73 (6) 3.08 (7) (6) 3.08 (7) (7) (7) (7) (7) (7) (7) (7) (7) (7)
		DRIVELINE RATIOS TRANSMISSION AXI	3- Spd 2.45 1.45 1.00 (R) 2.20	Į	8 pd 3.50 5 pd 3.50 1.03 1.03 1.03 1.03 1.03 1.03 1.03 1.0
		CAR	CREMIIN HORNET PACER		
	1977	TIOS	(a) 2.73 (c)(d) 3.08 2.53		
		DRIVELINE RATIOS TRANSMISSION AXLE	3- Spd 2.45 1.45 1.00 (R) 2.20		(DISCONTINUED)
ЛК		CAR	LIN ET		PACER PACER PACER PACER PACER PACER PACER PACER PACER
MOUEL YEAR	1976	ATIOS AXLE	10RQUE-CORMAND (3) (5 (-3) (3) (8) (4) (5) (2) (3) (9) (9) (9) (9) (9) (9) (9) (9) (9) (9		MARNER CEAR T-14 2.73 (RED 2.73 PAGE 2.73 PAGE 2.73 PAGE 2.73 RED 2.73 CRE 2.74 CRE 2.75 CRE 2.75 CRE 2.75 CRE 2.77 CRE 2.77 CRE 2.77 CRE 2.77 CRE 2.77 CRE 2.78
W		DRIVELINE RATIOS TRANSMISSION AXLE	3- Spd 2.45 Spd 2.45 1.00 (R) 2.20	(DISCONTINUED)	3.4 WARNIN 3.5 pd 3.100 (R) 2.636 (R) 2.636 (R) 2.636 (R) 2.636 (R) 2.636 (R) 2.636
		CAR MODELS	GREMLIN HORNET PACER	2.73 GREATIN 3.08 HONNET PAGE PAGE T-150 2.73 GREATIN 3.08 HONNET 3.08 HORNET	GRENLIN HORNET PACER WATANOR
	1975	ATIOS	2.73	1.73 (RED.) 3.08 (RED.) 3.08 (RED.) 5.73 (3.15
		DRIVELINE RATIOS TRANSMISSION AXLE	3- Spd 2.45 1.45 1.00 (R) 2.20	4- 5pd 2.990 1.700 1.000 (R) 3.170 5pd 3.99 5pd 3.99 (R) 3.17	3- 3- 3-3-3100 1.0744 1.050 (R) 2.636
AMC	LINEONE	TYPE AND SIZE (TRANS. TYPE)	232 (CONT) (AUTO)	(GANUAL)	(FANUAL) (MANUAL)

CAR DRIVELINE MAILOS CAR ORIVELINE MAILOS MODELS TRANSMISSION AXLE				
TRANSMISSION AXLE				
TRANSMISSION				
CAR				
			GREM.IN CONCORD PACER	
N ANLE		6	3.08 (c)(d)	
TRANSMISSION AND		(DISCONTINUEO)	3- Spd 2.45 1.45 1.00 (R) 2.20	
CAR		NCTS LTD REMLIN ACER	(f) (E) (d) (E) (d) (e) (d) (e) (d) (e) (d) (e) (d) (e) (d) (e) (d) (e) (e) (d) (e) (e) (e) (e) (e) (e) (e) (e) (e) (e	
A AXLE	ô	MITOMOTIVE PRODUCTS LTD (17) GREALIN 2.73 GREALIN (4) PACER 2.75 HORNET	(f) GERLIN 2.73 GERLIN 3.08 HORNET 2.53 PACER 3.15 MATADOR	6
TRANSMISSION AXLE	(DISCONTINUEO)	3- Spd 2.99 1.75 1.00 (R) 3.17	3- 1.45 1.00 1.00 (R) 2.20	(DISCONTINUEO)
CAR	GREALIN HORNET MATADOR PACER		GREMIN HORNET MATAGOR	PACER
N AXLE	2.73 2.73 3.08 3.15 3.15 3.54 3.54 3.08		2.73 2.73 3.08 3.08 3.15 3.15 3.08 3.08 2.53	WARNER GEAR T-14 00 2.73 PACE 44 3.08 36
TRANSMISSIO	2.99		3- Spd 2.54 1.45 1.00 (R) 2.20	3- Spd 3.100 1.744 1.000 (R) 2.636
CAR			EMLIN ICER (TADOR	BUT NOT
AXLE			2.73 GR 3.08 PAG 3.15 MA 3.54	MA SPECS.
TRANSMISSION			3- 5pd 2.45 1.45 1.00 (R) 2.20	USEO IN '75)
	(MANUAL)	(MANDAL)	то)	258CTD-2V (MANUAL)
UNIVELINE RAILUS CAR BURIVELINE RAILUS CAR	PE) TRANSMISSION AXLE MODELS TRANSMISSION AXLE MODELS	TRANSMISSION AND MODELS TRANSMISSION AND MODELS	TRANSHISSION ANLE MODELS TRANSHISSION ANLE MODELS TRANSHISSION ANLE MODELS TRANSHISSION ANLE MODELS TRANSHISSION ANLE MODELS TRANSHISSION ANLE MODELS TRANSHISSION ANLE	TRANSHISSION ANIE WODELS TRANSHISSION ANIE MODELS IRANSH

AMERICAN MOTORS ENGINE-TRANSMISSION-REAR AXLE PRODUCT SCHEDULE, 1975-80 (CONTINUED) FIGURE D-1.

	CAR			
0				
1980	DRIVELINE RATIOS RANSMISSION AXI			
	DRIVELINE RATIOS TRANSMISSION AXLE			
1979	CAR MODELS			
	AXLE	-		
	DRIVELINE RATIOS TRANSMISSION AXL			
	CAR		PACER ^(A)	HATADOR .
1978	IOS AXLE		2.87 PA (S) CC 2.56 (d) 3.15	2.87 (c) (d) 3.15
	DRIVELINE RATIOS TRANSMISSION AXL		3- 5pd 2,45 1.45 1.00 (R) 2.20	3- 5pd 2.45 1.45 1.00 (R) 2.20
	CAR		HORNET MATADOR	ATADOR
1977	TIOS		(a) (a) (e) 3.15 3.15 M	(a) 2.87 (a) 3.15 3.15 3.54
	DRIVELINE RATIOS TRANSMISSION AND	(DISCONTINUED)	3- 5pd 2.45 1.65 1.00 (R) 2.20	3 spd 2.45 1.45 1.00 (R) 2.20
	CAR	150 GREALIA ⁽¹⁾ HORNET HORNET	CREMLIN HATADOR HORNET	MATADOR
1976	TIOS	TREMEC 7-150 3.15 GRE 2.87 HOR 3.15 2.83 2.83	70801E-CONSALU 1.50	108QUE-COPMAND (3)
	DRIVELINE RATIOS TRANSMISSION AND	3- 5pd 2.99 1.75 1.00 (R) 3.17	3- 5pd 2.45 1.00 (R) 2.20	708qu 3- 5pd 2.45 1.45 1.00 (R) 2.20
	CAR	СКЕМЛИ НОКИЕТ	GREALIN HORNET MATADOR	MATADOR
1975	TI0S AXLE	3.54	3.15 (3.54
	DRIVELINE RATIOS TRANSMISSION AXLE	3- 5pd 2.99 1.75 1.00 (R) 3.170	3- Spd 2.45 1.45 1.00 (R) 2.20	3- 5pd 2.45 1.45 1.00 (R) 2.20
	TYPE AND SIZE (TRANS, TYPE)	(1	(ALTO) V-8 360CID-2V	(AUTO)

AMERICAN MOTORS ENGINE-TRANSMISSION-REAR AXLE PRODUCT SCHEDULE, 1975-80 (CONCLUDED) FIGURE D-1.

APPENDIX E REPORT OF NEW TECHNOLOGY

After a thorough review of the work performed under this contract, no new innovations, discoveries, improvements, or inventions were made or patents submitted.

The program did result in a better understanding of the automotive inudstry and its capacity to meet fuel economy goals due to the development of Product Schedules of Engine/Drivline Combinations for the domestic auto manufactuers.

HE 18.5 .A. NHTSA-

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